

*Original*

**BEFORE THE  
DEPARTMENT OF TRANSPORTATION  
WASHINGTON, D.C.**

DEPT. OF TRANSPORTATION  
DOCKETS

99 MAY -7 PM 4: 10

54889

**U.S. - CHINA AIR SERVICES**

**Docket OST-99- 5539 - 49**

**SUPPLEMENTAL CONSOLIDATED REPLY OF  
WAYNE COUNTY, MICHIGAN AND THE  
DETROIT METROPOLITAN WAYNE COUNTY AIRPORT**

Communications with respect to this document should be addressed to:

**David M. Katz**  
**Director of Airports**  
**Detroit Metropolitan**  
**Wayne County Airport**  
L.C. Smith Terminal  
Detroit, MI 48242

**Jean K. Olberstar**  
**Simat Helliesen & Eichner, Inc.**  
Suite 303  
4400 MacArthur Blvd., N.W.  
Washington, DC 20007  
(202) 342-1691  
Fax: (202) 337-6741

**Beverly Jones**  
**Simat Helliesen & Eichner, Inc.**  
1 Main Street  
Cambridge, MA 02 142  
(6 17) 225-2800  
Fax (6 17) 225-0328

**Bill Alberger**  
1725 Stonebridge Road  
Alexandria, VA 22304  
Phone: (703) 46 1-379 1  
Fax: (703) 46 1-3 790

Counsel for  
**WAYNE COUNTY, MICHIGAN &  
DETROIT METROPOLITAN  
WAYNE COUNTY AIRPORT**

May 7, 1999

**BEFORE THE  
DEPARTMENT OF TRANSPORTATION  
WASHINGTON. D.C.**

---

**U.S. – CHI-NA AIR SERVICES**

---

**Docket OST-99- 5539**

**SUPPLEMENTAL CONSOLIDATED REPLY OF  
WAYNE COUNTY, MICHIGAN AND THE  
DETROIT METROPOLITAN WAYNE COUNTY AIRPORT**

Wayne County and the Detroit Metropolitan Wayne County Airport (“DTW”), “The Wayne County Parties” file this supplemental consolidated reply to the amended application of United Airlines, Inc. (“United”) and answers and replies of United, Federal Express, and the City and County of San Francisco (“San Francisco”).

**I. INTRODUCTION**

On April 29, 1999, The Wayne County Parties filed a short “Reply” indicating strong support for the Northwest Airlines, Inc. (“Northwest”) application for Detroit-China services. We also indicated an intention to participate fully by filing exhibits and a brief in an anticipated proceeding to show the superiority of the

Northwest/Detroit gateway application over that of United/San Francisco. It now appears that the Department may not conduct such a full proceeding, and we do not want to be precluded from filing some materials we believe are essential for a full consideration of relevant issues. While we understand that the Department is allowing parties to file additional replies due to some recent changes in the United application, to the extent that it may be necessary for acceptance of this document, we hereby move to have this document accepted as late filed and out of the regular order. Had we realized that this process would be as expedited as it now appears to be, we would have made much more detailed and extensive filings at the answer and reply stages previously specified by the Department.

It continues to be our belief that this matter should only be decided after Direct Exhibits, Rebuttal Exhibits and Briefs by the parties. There are many controversial issues at stake here, and the proceeding covers two years of frequencies in one of the most important U.S.-Asia markets. Further, the U.S.-China aviation market is growing rapidly, despite the economic problems in so many Asian countries. It is our strong belief that acceptance of this document will not, in any way, disrupt the proceedings, will provide the Department with much needed information relevant to the decisions that must be reached, and will not

Beijing service via Tokyo. Detroit strongly supports the Northwest application, with the view that the two combination service frequencies must be awarded in order to complete the proposed Detroit-China service pattern.

If somehow the Department were to wrongly conclude that Northwest/Detroit should NOT receive its five combination frequencies applied for in 1999, then that application remains in play against the year 2000 applications. We thus address the United ~~and~~ Northwest applications comparatively later.

### **III. ANSWER TO FEDERAL EXPRESS APPLICATION**

Both Northwest and United have very ably stated the case against awarding numerous frequencies to an applicant concentrating on small package services, which are only a small percentage of an all-cargo market that is not in need of nearly as much expanded services as the U.S.-China passenger market. There would be no rhyme nor reason to an award of Federal Express' complete application for 1999 services, with an end result that of 31 available services between the United States and China, 12 would be dedicated to small package/all-cargo service. United would have 14 frequencies, Federal Express would have 12 and Northwest would have only 9. That result would not make any sense.

### **A. FEDERAL EXPRESS ALREADY PROVIDES DAILY SERVICE**

We note in United's Consolidated Answer at page 16 that Federal Express already provides daily express services to Beijing and Shanghai, using flights of other carriers to supplement its own aircraft. It is not at all clear that this daily service would receive any improvements if the application for 8 frequencies in 1999 were approved.

### **B. FEDERAL EXPRESS WANTS ONLY INTRA-ASIA SERVICES**

None of the Federal Express proposed services would be operated to or from the United States. This is all trans-Asia additions, involving Japan and/or Subic Bay. We recognize that 5<sup>th</sup> Freedom traffic has value, but in comparison with more direct new flights between the United States and China as proposed by Northwest, the Federal Express proposal should NOT receive priority. Both Northwest and United have quoted **from** the Department's decision in the 1992 U.S. -China All-Cargo Service Case, Docket 48001, where Evergreen was awarded service over Federal Express because the latter proposed **intra-Asia** services linked to its U.S.-Japan/Korea operations. When Federal Express acquired the U.S.-China all-cargo service route **from** Evergreen, it indicated a plan "to switch to a nonstop service once U.S.-China demand can support such a service" (Order 95-6-30 at p. 3). Since Federal Express is now claiming rosy projections of U.S. -China cargo

demand, isn't it interesting that its proposal does not include any U.S.-China nonstop services?

We note that Federal Express has full authority today to operate any of its current U.S.-China frequencies nonstop between the two countries. Instead it chooses to operate all intra-Asia, and proposes only more of the same in this proceeding. Northwest has noted that Federal Express derives 62 percent of its U.S.-China revenue from non-U.S. market sources (NW-22).

### **C. HIGH VALUE EXPRESS SERVICE IS THE FOCUS**

Northwest has illustrated at p. 14 of its Consolidated Answer that Federal Express derives 99 percent of its revenue and 98 percent of its volume from the "high value" "on-line express" market. (Citing FX-301, 302 & 303) This "market" is only a tiny portion of the U.S.-China air cargo market – only 4.3 percent. (See NW-25 and DTW- 1, using data from FX-2 11 & FX-2 14). There should be no question that an award of multiple frequencies to Federal Express for service to such a small portion of the U.S.-China market in either year would be unsupportable, and contrary to the public interest.

### **D. SHENZHEN SERVICE DUPLICATES HONG KONG**

Both Northwest and United have also noted that the Federal Express proposed service, primarily in year 2000, to Shenzhen would largely duplicate

existing services to nearby Hong Kong. Nine U.S. carriers, including Federal Express, are authorized to provide U.S.-Hong Kong all-cargo service, so it would make little sense to waste 6 valuable U.S.-China frequencies on such a duplicative effort. (See NW-28 & 29) Not one of the top ten industries in Shenzhen produces high value **exports** to the United States of the type that Federal Express covets for transport. (NW-26).

It would seem that a much higher priority over the Federal Express Shenzhen proposal should be filling the need for more air services between the rapidly developing Shanghai auto industry and the world headquarters of the U.S. auto industry in Michigan. The Shanghai auto industry was an \$8 billion business in 1996, the most recent year for which data is available. The linkage between the Shanghai industry and Michigan is growing, as we note in DTW-2. Twelve auto related businesses operating in Shanghai are headquartered in Michigan, including Ford and General Motors. We expect the cooperation and expansion to continue when the direct air connections are strengthened, as Northwest has proposed. (See also our listing of Michigan businesses operating in Shanghai in DTW-3).

#### **IV. ANSWER TO UNITED/SAN FRANCISCO APPLICATION**

It is possible, depending upon how the Department wishes to split combination frequencies and all-cargo frequencies, for United and Northwest to

both receive all requested combination frequencies. For example, if the Department were to award 5 frequencies in 1999 for combination services (Northwest is the only applicant) and 3 for cargo, there would be 7 all-cargo frequencies and 28 combination carrier frequencies. This would result in a ratio of 1 to 4, which is very close to the current ratio of such services in Trans-Pacific markets (DTW-4). It is, however, more than 3 times as high as the Trans-Atlantic ratio, where all-cargo only represents about 6 percent of all services.

We would advocate the Department choosing to split the 1999 frequencies by awarding 5 to combination service and 3 to all-cargo. If, however, the Department chooses to award more than 3 all-cargo frequencies in 1999, OR any all-cargo frequencies in 2000, then the United and Northwest applications become mutually exclusive, at least to the extent of the total number of all-cargo frequencies exceeding 3 that the Department determines to award, either to Federal Express or to Northwest. Thus, we have taken some time and space to compare the relative merits of the United/San Francisco proposal and the Northwest/Detroit proposal. We will show that the net benefits to San Francisco, Chicago and New York of the the United proposal are minimal, while the benefits to Detroit of the Northwest proposal are extensive. The State and City of New York will gain significant benefits ~~from~~ the Northwest proposal, both in single flight number service and



elapsed times. Even the Washington, D.C. area will receive better elapsed time service to China on Northwest than on the single flight number United proposal of Washington Dulles-San Francisco-Shanghai. Elapsed time comparisons for Shanghai service decidedly favor Northwest/Detroit for most major U.S.-China markets.

Northwest has been providing nonstop service between Detroit and China for 2 years, and proposes even more such service. United, despite having more frequencies available for U.S.-China service, has never provided it, preferring all its frequencies to be used in Japan-China services. Only now does it propose nonstop service from the United States to China. If all combination service applications were approved, United would operate only 7 of 21 frequencies nonstop, while Northwest would operate 8 of 16 nonstop from Detroit.

As a U.S. gateway for China service, Detroit is actually well-positioned to serve most of the population centers in the United States, with the exception of the western states. For the South, the East and the Midwest, Northwest/Detroit provides excellent connections for travel to and from China. The United hub at San Francisco is simply not as large as Northwest/Detroit, and there is a circuitry problem with using San Francisco as a gateway to China for much of the Eastern 2/3 of the United States.

**A. UNITED'S PROPOSAL IS OF MINIMAL ACTUAL BENEFIT TO CHICAGO, NEW YORK AND SAN FRANCISCO**

United has provided confusing information about what it proposes to do in this proceeding. As we now understand its current offerings, it proposes the following for San Francisco:

1. Removal of the current San Francisco-Tokyo-Shanghai single flight number and sometimes single plane service.
2. Removal of the current San Francisco-Tokyo-Beijing single flight number and sometimes single plane service.
3. A new nonstop service between San Francisco and Shanghai.

This new service is one that United could have provided any time from 1994 through the present and on into the future with some of United's existing 14 U. S. - China frequencies. Obviously, United made a judgment that nonstop service between **Shanghai** and San Francisco was NOT as valuable as one stop service via Tokyo. Thus it appears that San Francisco is going from 14 one stop frequencies, including service to Beijing, to 7 nonstops, with service only to Shanghai.

What passes for a gain for San Francisco is something that, based on United's lofty arguments about how important nonstop service is **in this market**, United should have been and could have been providing today. In its answer, United certainly seemed to be arguing that the San Francisco-China market was so

strong that it required 2 1 frequencies, including the nonstop service. What it seems to now be saying is that just 7 is about right, providing it is a daily nonstop. This is an interesting transformation, and not necessarily beneficial for San Francisco. Consider this question – “if San Francisco does not care about losing its single flight number sometimes single plane services to Shanghai and Beijing, just exactly what does either Chicago or New York have to be excited about?”

Chicago will receive the following change in service to China -- replacement of the current Chicago-Tokyo-Beijing change of plane service with a single plane service. United makes statements that suggest that this is an upgrade, when, in fact, it does not appear to provide any improvement at all. Today’s service is all in 747-400 aircraft, just as the proposed schedule would be. The flight times are identical, with the exception that somehow the new schedule shaves 5 minutes off the Tokyo-Chicago segment, which segment is not part of the “new proposal”. The single plane service will have the same lengthy layovers in Narita Airport that today’s change of plane service has – 2 hours and 25 minutes in the westerly direction and 2 hours and 50 minutes in the eastbound direction. All layovers at Narita on international-to-international services require that transiting passengers depart the airplane, take carry-on luggage, and clear security at Narita, whether the connection

at Narita involves a single plane or a change of planes. Thus, the “same plane service benefits” do not exist at all.

New York JFK will receive the following change in service to China -- replacement of the current New York-Tokyo-Shanghai change of plane service with a single plane service. United also makes statements suggesting that this is an upgrade for New York, but it appears from the evidence provided that it may even be a **downgrade**. Today’s service is all in 747-400 aircraft, so there would not be any additional seats available. The flight times are nearly identical, except that in the westbound direction, the departure time is 15 minutes earlier from JFK, the arrival time in Tokyo is 5 minutes earlier, and the layover is 5 minutes longer before departure for Shanghai. Thus, the total elapsed time is 15 minutes longer than today’s service offering by United in the New York-Shanghai market. The layover in Tokyo **westbound** is 3 hours and 10 minutes, and eastbound, it is 2 hours and 35 minutes. Both layovers scream for an exit from the charm of the single plane, and, as we noted above, Narita requires exit from the plane with carry-on luggage on all international-to-international services for reasons of security and for cleaning of the airplane. Thus, as we review the “benefits” for New York, we face the question of whether the extra 15 minutes one must show up earlier at JFK airport is worth being able to **say** it is only one airplane going one-stop to Shanghai. When airlines often

rotate aircraft for various reasons, and United has several 747-400s flying through Tokyo, one wonders if there is any guarantee that this will always be “single plane service”, for what little that is worth when transiting Narita Airport.

While the “benefits” for Chicago, New York and San Francisco of the United proposal for changing its U.S.-China services can best be described as illusory, there is no question whatsoever that Detroit will receive very positive and substantial benefits from the Northwest proposal. Detroit will have at least daily service to and from both Beijing and Shanghai. In 1999, 5 of the seven Detroit-Beijing flights will operate nonstop from Detroit and two will have an intermediate stop in Tokyo. Also in 1999, 2 of seven Detroit-Shanghai flights will operate nonstop **from** Detroit, and 5 will have an intermediate stop in Tokyo. This is an increase of 2 weekly **nonstops** and 3 weekly one-stops between Detroit and Shanghai. That is a clear benefit in 1999. In 2000, the Northwest proposal would add one more weekly nonstop between Detroit and Shanghai and one more weekly one stop from Detroit to Beijing, adding obvious additional benefits for Detroit.

## **B. ELAPSED TIMES**

Northwest has provided some evidence of elapsed time superiority over the United/San Francisco-Shanghai proposal for its proposed services in 39 of the top

50 U.S.-Shanghai markets (See NW-R-1, based on NW-12). We have additional evidence (DTW-5). We have looked at the top 50 markets for U.S.-Shanghai O&D traffic, and we **find** that not only does Northwest/Detroit provide the fastest times for 39 (78 percent of the markets), but those markets account for 81 percent of the O&D **traffic**, versus only 19 percent for the 11 markets where San Francisco would provide better elapsed times.

In view of United's late announcement of the transfer of its San Francisco-Tokyo-Shanghai one-stop service **from** San Francisco to New York JFK, it is interesting that for both JFK and LaGuardia airports, service to Shanghai is considerably quicker via Detroit on Northwest than on United either via Tokyo or via **San** Francisco. We note that for the other New York State cities – Albany, Binghamton, Buffalo, Elmira/Coming, Rochester, Syracuse and Westchester County, connections on Northwest via Detroit provide better elapsed times than any offerings under the United proposal. Even looking at Northwest's **onestop** service to Shanghai via Detroit and Tokyo, Northwest is faster for Binghamton, Buffalo, Elmira/Coming, New York **LaGuardia**, Rochester, Syracuse and Westchester County (DTW-6).

Detroit is also a superior gateway in terms of elapsed times for 10 of United's largest nonstop markets (DTW-7). These markets include United's largest hub at

Chicago, its one-stop single flight number point at Washington, D.C., and other large cities like Boston, Miami, Atlanta, Orlando, Philadelphia and Newark. In every one of these markets, the elapsed time for Northwest's Detroit-Shanghai connections is superior to United's proposed San Francisco-Shanghai connections. For the ten markets, the elapsed time savings on a routing via Detroit rather than San Francisco ranges from 1 hour and ten minutes to more than 6 hours. For six of the ten markets, the savings is more than 3 hours – Philadelphia, Newark, Baltimore, Washington Dulles, Orlando and Miami. That is a considerable saving of time for passengers in several of the largest U.S.-China O&D markets.

Not surprisingly, given the elapsed time superiority of Detroit over San Francisco, an analysis of O&D data that we are not disclosing shows that Detroit is definitely the preferred gateway for most passengers in the Midwest and East, while San Francisco and Los Angeles are preferred in the Western States (DTW-8).

### **C. NORTHWEST IS MORE DEDICATED TO U.S.-CHINA MARKET**

Northwest has shown in the past 2 years that it is dedicated to providing nonstop service between the United States and China. It is the only U.S. airline currently providing such service. United, which has been allocated 14 of the currently available 27 frequencies, does not provide any nonstop service. For the first time in this proceeding, it proposes to do so. Thus, despite the lead in overall

U.S.-China frequencies that United enjoys over Northwest (14-9), Northwest actually carries more U.S. -China O&D passengers (DTW-9). We also have evidence that the load factor on Northwest's Detroit-Beijing service is higher than the load factors on the San Francisco-Tokyo-Beijing/Shanghai service provided by United (DTW- 10).

Northwest has been criticized by United for the additional access it secured to China with its code share relationship negotiated with Air China. That relationship places the NW code on Air China service between China and San Francisco and between China and Los Angeles. Air China then has its code on connecting services provided by Northwest from San Francisco to Minneapolis, Detroit and Memphis, and between Los Angeles and Minneapolis, Detroit, Memphis and Las Vegas. Since neither Air China gateway is a Northwest hub, there are not many connecting flights on which Air China could place its code. As Northwest explained very carefully and thoroughly in its Consolidated Reply at pp. 7-8, the cases cited by United all involved U.S. carriers applying for frequencies to be used in U.S. hub to foreign hub markets in which both the U.S. carrier and the foreign carrier provided service. That is not the case in this proceeding. Air China does not provide its own service to Detroit. Northwest is not operating hubs at either Los Angeles or San Francisco, and is not applying for service from either



point to China (DTW-11). The cases are clearly distinguishable. The claim by San Francisco in its answer in support of United that United needs more frequencies to achieve parity with Northwest is ridiculous.

**D. NORTHWEST/DETROIT IS A MORE COMPLETE HUB FOR U.S.-CHINA SERVICE THAN UNITED/SAN FRANCISCO**

The Northwest hub at Detroit is larger than the United hub at San Francisco (DTW-12). Northwest/Detroit has 530 daily nonstop departures, compared to 328 for United/San Francisco. It stands to reason that the Detroit gateway can serve more behind gateway points than can San Francisco. We have looked at the potential behind points for Detroit and San Francisco, and have eliminated points with more than 20 percent **circuitry**. We have found 82 nonstop markets for Detroit and 38 for San Francisco (DTW-13). Additionally, of Northwest's 99 nonstop domestic nonstop markets at Detroit, 84 would be better served over Detroit than over San Francisco (DTW- 14). Thus, the strength of the Detroit hub will strongly support **the** China services.

San Francisco indicated plans for improvements at its airport. Detroit is constructing a new Midfield Terminal. The \$786 million terminal is 2,000,000 square feet, housing 74 jet gates and 25 commuter gates. The terminal is scheduled

to open in 2001, and by 2005, will be able to process 3200 international passengers per hour (DTW- 15).

Michigan and the Detroit area have strong ties to China that are growing rapidly as the air service provides support for strengthening the natural links. The Michigan based auto industry has made great strides in opening factories in China and working with local Chinese industry to develop parts suppliers. General Motors, Ford and Chrysler all have facilities in China to support the growing trading relationships. We show the dollar value of Michigan exports to China by industry in DTW-16.

Any new service will obviously generate tremendous economic impact for the gateway region. We show in DTW-17 an estimate of the impact of the proposed Northwest services on the Detroit region. Our numbers produce a year 1 impact of more than \$160 million, and a year 2 impact exceeding \$235 million.

#### **E. MISSTATEMENTS BY SAN FRANCISCO**

San Francisco has alleged that “over 75 percent of Northwest’s proposed service involves one-stop service over Narita rather than service focused on the primary U.S.-China market” (San Francisco Consolidated Reply at page 4). This is simply wrong. Northwest has proposed, as San Francisco even noted, 3 weekly **nonstops**

between Detroit and Shanghai. We assume San Francisco counted the 4 all-cargo frequencies Northwest requested, but even if that is included, 8 of 11 is not more than 75 percent, using any form of math. What seems more relevant, however, is that Northwest proposes to operate 8 of its 16 combination frequencies nonstop between the U.S. and China, and has been operating 5 out of its 9 frequencies between the United States and China nonstop. Both of those relationships are 50 percent nonstop flights or more. United has operated all 14 of its frequencies via Japan, so its current percentage of nonstop flights is ZERO. If United obtains its frequency request and operates 7 frequencies nonstop between San Francisco and Shanghai, it would be operating 7 of 21 frequencies nonstop. That is 33 1/3 percent, by our calculations, and is well below what Northwest/Detroit would have.

Additionally, San Francisco seems to take the position that United, which has ignored the nonstop market for the last 5 years, should now be totally rewarded with everything it wants. Meanwhile, Northwest, which devoted 5 of its more scarce 9 frequencies to the nonstop Detroit-Beijing market, should be penalized because now it is **applying** for 7 combination frequencies (same number of combination frequencies sought by United), but Northwest will use only 3 for nonstop services. Northwest plans to use the other 4 combination frequencies it seeks to attempt to compete more effectively in the U. S.-Japan-China market that United has

dominated<sup>1</sup> with 14 frequencies since 1994. Why should Northwest be penalized for its efforts in the nonstop market while United concentrated far more frequencies in Japan-China operations and none in the nonstop market. That hardly seems fair. If both carriers received **all** of their requested combination frequencies, which **IS** a possible outcome, Northwest/Detroit would have more U.S.-China nonstop flights than United/San Francisco.

San Francisco has also totally misunderstood precedents in the U. S.-Germany, U.S.-Brazil and U.S.-France proceedings. As we explained above, those decisions all involved cases where the foreign carriers code sharing with the U.S. applicant carrier also served the hub to hub market applied for, and could add service if desired. That is **NOT** the case here.

San Francisco says that the critical need of the U.S.-China market is for daily, nonstop, combination U. S.-China service. **IF** that is the critical need, its carrier, United, could have recognized it and provided it long ago. Northwest has been providing such service, whether that is the critical need or not. The Northwest/Detroit proposal provides more of that, too – serving Beijing as well as Shanghai.

**F. SINGLE FLIGHT NUMBER BEHIND GATEWAY SELECTION OF NEW YORK IS PREFERABLE TO -WASHINGTON, DC**

Northwest has proposed single flight number service to Beijing for New York's LaGuardia airport and single flight number service to Shanghai for Newark airport. United has proposed to provide single flight number service to Shanghai for Washington Dulles airport. Which single flight number service potentially reaches the largest Chinese community? We have provided some information in DTW- 18 showing the number of Chinese immigrants living in the Washington area and in the New York area. The totals are staggering:

New York Area Chinese Immigrants	149,609
Washington Area Chinese Immigrants	16,755
Percent New York of Washington	893 %

We also have numbers showing the population of the Chinese-American communities in the New York CMSA and the Washington CMSA (DTW-19). Again, the advantage for New York is staggering.

New York CMSA Chinese-American Population	320,201
Washington CMSA Chinese-American Population	39,034
Percent New York of Washington	820 %

While the above illustrates that New York is a better behind point than Washington for Shanghai service, our elapsed time evidence in DTW-5 shows that the Northwest/Detroit service provides faster elapsed times to Shanghai for LaGuardia, Newark and Washington over United/San Francisco. Thus, both New York and Washington will be better off with the Northwest/Detroit service to Shanghai.

## **V. CONCLUSIONS**

We have believed from the beginning that this case requires Direct Exhibits, Rebuttal Exhibits and Briefs before a well-reasoned decision should be made. However, since the Department seems to be headed in the direction of a quicker decision based only on filings made to date, we submit the following. For 1999, we believe that 5 frequencies should be immediately awarded to Northwest for combination services between Detroit and China. The other three available frequencies can then be assigned to ah-cargo service, where Northwest offers to provide competitive ah-cargo service in this marketplace, with a concentration on heavier cargo rather than small package services, and where Federal Express promises more **intra-Asia** small package services. For 2000, when the Department must **allocate** 9 frequencies, the choices are more difficult, but we believe you

should assign 2 frequencies for Northwest/Detroit services. This would provide another nonstop frequency to Shanghai and the only Beijing new service proposed by a combination carrier in this proceeding. We take no **further** position on your remaining dilemma in deciding between Federal Express' application and that of United. Finally, we ask that if you believe it is necessary in order to receive this document, that you approve our motion to file this document.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Bill Alberger", written in a cursive style.

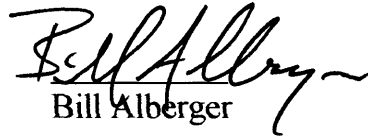
**Bill Alberger**  
1725 Stonebridge Road  
Alexandria, VA 22304  
(703) 461-3791

Counsel to the  
**WAYNE COUNTY PARTIES**

May 7, 1999

**CERTIFICATE OF SERVICE**

*I hereby certify that copies of the Supplemental Consolidated Reply of Wayne County, Michigan and the Detroit Metropolitan Wayne County Airport were served this 7<sup>th</sup> day of May, 1999 by courier or mail on the attached Service List.*

  
Bill Alberger

**(For Federal Express)**

Nathaniel P. Breed, Jr. (by courier)  
Shaw Pittman Potts & Trowbridge  
2300 N Street NW  
Washington, DC 20037

Rush O'Keefe (by mail)  
V. P. Regulatory Affairs  
Federal Express Corp.  
1980 Nonconnah Blvd.  
Memphis, TN 38132

David Glauber (by mail)  
Senior Attorney  
Federal Express Corp.  
1980 Nonconnah Blvd.  
Memphis, TN 38 132

Brian M. Campbell (by courier)  
Campbell-Elli11 Aviation Group  
700 N. Fairfax, Suite 502  
Alexandria, VA 223 14

**(For United Airlines)**

Jeffrey A. Manley (by courier)  
Cathleen P. Peterson  
Kirkland & Ellis  
655 15<sup>th</sup> Street NW  
Washington, DC 20005

**(For Northwest Airlines)**

Elliott M. Seiden (by courier)  
David Mishkin  
Megan Rae Poldy  
Northwest Airlines, Inc.  
901 15<sup>th</sup> Street NW  
Suite 3 10  
Washington, DC 20005

**(For San Francisco)**

Kenneth P. Quinn (by courier)  
John E. Gillick  
Winthrop, Stimson, Putnam & Roberts  
1133 Connecticut Avenue, NW  
Washington, DC 20036

John L. Martin (by mail)  
Airport Director  
San Francisco International Terminal  
PO Box 8097  
San Francisco, CA 94628

Mara E. Rosales (by mail)  
Airport General Counsel  
City Attorney's Office  
San Francisco International Terminal  
5<sup>th</sup> Floor  
San Francisco, CA 94628



**(For United Airlines)**

Shelley Longmuir (by courier)  
Mark Anderson  
United Air Lines, Inc.  
1025 Connecticut Avenue, NW  
Suite 1210  
Washington, DC 20036

Michael G. Whitaker (by mail)  
Jonathan Moss  
United Air Lines, Inc.  
P.O. Box 66 100, WHQIZ  
Chicago, IL 60666

**(For State Dept.)**

David M. Marchick (by mail)  
Deputy Assistant Secretary for  
Transportation Affairs  
U.S. Department of State  
2201 C Street N.W., Room 5830  
Washington, DC 20520

**(For China)**

His Excellency Mr. Li Zhaoxing (by courier)  
Ambassador of the People's Republic of China  
2300 Connecticut Avenue, NW  
Washington, DC 20008

**The “High Value” Cargo Markets, As Defined by Federal Express,  
Represent Only 4% of the US-China Air Cargo Market**

<b>1998 US-China Trade by Air</b>	<b>“High Value” Commodities /1</b>	<b>All Commodities</b>	<b>Percent “High Value”</b>
<b>Total US-China (lbs)</b>	<b>24,980</b>	<b>586,412</b>	<b>4.3%</b>
US Exports to China (lbs)	21,537	80,184	26.9%
US Imports to China (lbs)	3,443	506,228	0.7%

/1 “High Value” Commodities defined as commodities valued at a minimum of \$75 per pound per Exhibit FX-113.

*Source: Exhibits FX-277 and FX-274*

Detroit -- Shanghai Nonstop Service will  
Connect the Motor Capital of the U.S. with  
the Motor Capital of China

⇒ Shanghai's auto industry is an \$8 billion business (1996)

⇒ Transportation equipment ranks second in dollar value of  
exports  
to China from Michigan

⇒ At least 12 U.S. auto-related businesses operating in Shanghai  
are: headquartered in Michigan

*Source: Shanghai Automotive Industry Corp., U.S. Census Bureau, State of  
Michigan*

## **40 Michigan Companies Have Offices or Joint Ventures in China**

### **27 Michigan Companies Have Offices or Joint Ventures in Shanghai**

#### **1. Acheson Limited Shanghai Representative Office**

Rm. 6, 8/F, Block A, Harvest Building

585 LongHua West Road

Shanghai, 200232

Tel: 86-21-6469-9802

Fax: 86-21-6469-9801

Contact: Timothy R. Scales

Representative Office

Headquarters: MI

Industrial Code: ZSV

- Research Services Market, Economic, Trade

#### **2. AlliedSignal Turbocharging Systems, Shanghai Ltd.**

Zhang Jiang Hi-Tech Park

No. 8, Niu Dun Rd. Pudong

Shanghai 201203

Tel: 86-21-5080-1020

Fax: 86-21-5080-1030

Contact: Paul Wang

Title: Manager, Procurement

Foreign Enterprise

Headquarters: NJ (a branch in MI)

Industrial code: APS

- Automotive Products, Supplies

#### **3. Amway (China) Co., Ltd. Shanghai Branch**

2/F, Sino Bldg, 113 Nan Dan East Rd.

Shanghai 200030

Tel: 86-21-6438-5188

Fax: 86-21-6438-5211

E-mail : Percy-china@amway.com

Contact: Percy Chin

Vice General Manager

Headquarters: MI

Industrial Code: COS

- Cosmetics & Toiletries

**4. Davvning & Bright Corp., Inc. (USA), Shanghai Office**

37 Shuicheng Rd., Vanke Commercial Plaza

E Bldg, #1002/C, Gubei New Area

Shanghai, 201103

Tel: 86-21-6295-2828

Fax: 86-21-6270-2495

Contact: Richard Cul

Title: Chief Representative

Representative Office

Headquarters: MI

Industrial Code: OGM

- Petrochemicals, Machineries & Equipments

**5. Delphi Packard Electric Shanghai Co., Ltd.**

492 Moyu Road, Anting Town

Jiading,, Shanghai 201805

Tel: 86-21-5957-3781

Fax: 86-21-5957-2064

Contact: Nancy Gougarty

Joint Venture

Headquarters: MI

Industrial Code: APS

- Automotive Products, Supplies, Services

**6. Delta (Masco) Faucet Company Shanghai Rep. Office**

E, 18/F Xin Jian Ye Center

2438 Zhong Shan North Road

Shanghai 200063

Tel: 86-21-6285-5561

Fax: 86-21-6285-5567

E-mail: deltasha@public.sta.net.cn

Contact Person: Sam Yang

Title: **Manager**

Representative Office

Headquarters: IN (a branch of Masco, Masco's headquarters is in MI)

Industrial Code: BLD

- Faucet of Bath Lavatory
- Kitchen & Household Equipment

**7. Dow Chemical (China) Ltd.**

Suite 1101, Shui On Plaza

333 Huai Hai Zhong Road

Shanghai 200021

Tel: 86-21-6336-6998

Fax: 86-21-6336-7917

Contact: David Lu

Title: Chief Representative

Representative Office

Headquarters: MI

Industrial Code: ICH

- Chemicals Products

**8. Dow Corning (Shanghai) Co., Ltd.**

Suite 709, Dynasty Business Centre,

457 Wulumuqi North Road

Shanghai, 200040

Tel: 86-21-6249-23 16

Fax: 86-21-6249-23 17

Contact: Alex Tan

Representative Office

Headquarters: MI

Industrial Code: GIE

- Manufacturing Other

**9. Eaton Corporation**

Suite 2206-2208 Super Ocean Finance Centre

2168 Yan An West Road

Shanghai 200335

Tel: 86-21-6278-5090

Fax: 86-21-6278-5089

E-mail: GordonDore@vines.etn.com

Contact: Gordon Dore

Title: General Manager

Joint Venture

Headquarters: OH (branches in MI)

Industrial Code: APS

- Automotive Products, Supplies

**10. Ford Automotive Components Ops. Inc.**

Suite B, 3/F, Yin Hai Building

250 Caoxi North Road

Shanghai 200233

Tel: 86-21-6475-1135

Fax: 86-21-6482-2241

E-mail: dsherman@ford.com

Corporate: David H. Sherman

Title: Chief Representative

Representative Office

Headquarters: MI

Industrial Code: APS

- Manufacturing Other

**11. General Motors Overseas Corp. Shanghai Branch**

4/F, Tomson International Commercial Building

7 10 Dongfang Road, Pudong

Shanghai 200 122

Tel: 86-21-6875-8833

Fax: 86-21-5830-7439

Contact: Sandra Thompkins

Title: General Director Hum.

Representative Office

Headquarters: MI

Industrial Code: APS

- Manufacturing Other

**12. Giddings & Lewis, Inc.**

Rm. 2103, Shenxin Bldg. 200

Ninghai Rd. (E), Shanghai 200021

Tel: 86-21-6374-2997

Fax: 86-21-6374-2998

Contact Person: Fred Qian

Representative Office

Headquarters: WI (a branch in MI)

Incorporated: USA

- Automotive Products, Supplies

**13. GM China, Inc. Shanghai Office**

4/F, Tomson International Commercial Building 7 10

Dongfang Road, Shanghai, 200122

Tel: 86-21-6875-8833

Fax: 86-21-5830-7435

Contact: Philip F. Murtaugh

Representative Office

Headquarters: MI

Industrial Code: TRK

- Manufacturing Other

**14. Haworth Furniture (Shanghai) Co., Ltd.**

19/F, OOCL Plaza,

841 Yanan Middle Road

Shanghai 200040

Tel: 86-21-6289-6855

Fax: 86-21-6289-5833

E-mail: [colin.snow@haworthinc.com](mailto:colin.snow@haworthinc.com)

Contact Person: Colin Snow

Foreign Enterprise

Headquarters: MI

Industrial Code: FUR

- Office Furniture

**15. Haworth Furniture ( Shanghai) Co., Ltd.**

No. 2 Factory., Lot FW 7-3

360 Xi Ya Road

Waigaoqiao Free Trade Zone

Shanghai 200137

Tel: 86-21-5046-0907

Fax: 86-21-5046-0911

Contact Person: Terry L. Locatis

Foreign Enterprise

Headquarters: MI

Industrial Code: FUR

- Metals/Metal Products



**16. HOK Inc. Shanghai Rep. Office**

Suite 19C, Shanghai TV & Broadcasting Tower

651 Nanjing West Road

Shanghai 200041

Tel: 86-21-6267-9260

Fax: 86-21-6267-9259

E-mail: [hokshg@uninet.com.cn](mailto:hokshg@uninet.com.cn)

Contact: Qingdong Liang

Representative Office

Headquarters: MI

Industrial Code: ACE

- Architects/Building Systems Manager

**17. Kmart Shanghai**

Suite I/J, 22/F, Hua Du Mansion, 838 Zhangyang Road

Shanghai, 200122

Tel: 86-21-5820-3204

Fax: 86-21-5820-6526

E-mail: [raymer@public.sta.net.cn](mailto:raymer@public.sta.net.cn)

Contact: Lizhen Ye

Representative Office

Headquarters: MI

Industrial Code: TRD

- Trading

**18. Methode Electronics (China) Inc.**

38 Caoxi Bei Road, Suite 23B

Shanghai 200233

Tel: 86-21-6438-9861

Fax: 86-21-6438-9861

E-mail: [methode@uninet.com.cn](mailto:methode@uninet.com.cn)

Contact: Bowei Yu, PH.D

Title: Director-China

Representative Office

Headquarters: MI

Industrial Code: APS

- Automotive Products, Supplies

**19. Pan Asia Technical Automotive Center Co., Ltd.**

141, Liangji Road, Jinqiao Pudong

Shanghai 201206

Tel: 86-21-5899-1333

Fax: 86-21-5899-1517

Contact: Martin Long

Title: General Manager

Joint Venture

Headquarters: MI

Industrial Code: APS

- Automotive Research

**20. Shanghai Donnelly Fu Hua Window Systems Co., Ltd.**

700 Yao Hua Road, Pudong

Shanghai 200126

Tel: 86-21-5845-9564

Fax: 86-21-5845-5683

Contact: Jim Ciccateri

Title: General Manager

Joint Venture

Headquarters: MI

Industrial Code: APS

- Automotive Products, Supplies

**21. Shanghai Fudian Automotive Electronics Co., Ltd.**

300 Minolta Road

Songjiang County, Shanghai 201600

Tel: 86-21-5774-1278

Fax: 86-21-5774-1271

E-mail: [sbarnes1@gw.ford.com](mailto:sbarnes1@gw.ford.com)

Contact: Scott Barnes

Title: General Manager

Joint Venture

Headquarters: MI

Industrial Code: APS

- Automotive Products, Supplies

**22. Shanghai Lomason Automotive Seating Systems Co., Ltd.**

3 138 Gong He Xin Road

Shanghai 200072

Tel: 86-21-5665-1956

Fax: 86-21-5665-1956

E-mail: slasco@public.sta.net.cn

Contact: W. Keith Lomason

Title: President

Representative Office

Headquarters: MI

Industrial Code: APS

- Automotive Products, Supplies

**23. Shanghai Ri Yong-UTA Gate Electric Co., Ltd.**

565, Guangzhong Road

Shanghai 200083

Tel: 86-21-5665-2500

Fax: 86-21-5665-1711

Contact: Wolfgang Weber

Title: Vice General Manager

Joint Venture

Headquarters: MI

Industrial Code: ELO

- Fraction Horsepower

**24. Steelcase Asia Inc. China**

Flat 20 F2, Jiushi Renaissance Mansion

9 18 Huai Hai Rd.

Shanghai 200020

Tel: 86-21-6415-5363

Fax: 86-21-6415-5298

Contact Person: Todd Shepherd

Representative Office

Headquarters: MI

Industrial Code: FUR

- Office Automation/Business Systems

**25. Shunde Whirlpool SMC Microwave Products Co., Ltd. Shanghai Offices**

Unit A & B, 17/F, Shanghai East Ocean Centre

588 Yan An East Road,

Shanghai 200001

Tel: 86-21-6350-8228

Fax: 86-21-6350-8229

Contact: Vicent Yuen

Representative Office

Headquarters: MI

Industrial Code: ACR

- Air Conditioning, Refrigeration & Service

**26. Whirlpool Greater China Inc. Shanghai Rep. Office**

8/F, Novel Plaza

128 Nanjing West Road

Shanghai 200003

Tel: 86-21-6350-8228

Fax: 86-21-6350-8233

E-mail: Vincent-Yuen@email.whirlpool.com

Contact: Vincent Yuen

Title: President & MD

Representative Office

Headquarters: MI

Industrial Code: ACR

- Air Conditioning, Refrigeration

**27. Whirlpool Narcissus (Shanghai) Co., Ltd.**

25 Sharp Road, Jinqiao Export Processing District

Pudong, Shanghai 201206

Tel: 86-21-5899-5179

Fax: 86-21-5899-5767

Contact: Hank Orme

Title: General Manager

Joint Venture

Headquarters: MI

Industrial Code: GCG

- Consumer Goods

## **40 Michigan Companies Have Offices or Joint Ventures in China**

### **14 Michigan Companies Have Offices or Joint Ventures in Beijing**

#### **1. Amway (China) Ltd.**

5/F Grand Pacific Building  
8A Guang Hua Rd.  
Chaoyang Dist. Beijing 100026  
Tel: 86- 1 o-6503-2288  
Fax: 86- 1 o-6500-8282  
Contact: Audie Wong  
• Consumer Products

#### **2. Beijing Jeep Corporation, Ltd.**

36, Guang Qu Road  
Chao Yang Dist., Beijing 100022  
Tel: 86- 1 O-677 1-2233  
Fax: 86-10-6771-1363  
Contact: Andy Okab  
Title: Vice President  
. Auto

#### **3. Chrysler International Services, S.A. China Business Office**

Jing Guang Centre, Suite 2603-2605  
Hu Jia Lou, Chao Yang District  
Beijing 100020  
Tel: 86- 1 O-650 1-2894/3024  
Fax: 86-10-6501-4595  
Contact: Edmond P. Chu  
Title: Director, Sales & Marketing  
. Auto

#### **4. Delphi Automotive Systems China Inc.**

Block C. Guomen Building No. 1  
Zuojia Zhuang, Chaoyang Dist.  
Beijing 100028  
Tel: 86-10-6468-8822  
Fax: 86- 1 o-6468-460 1  
Contact: Marcus Chao, Ph.D.  
• Auto Parts

**5. Dow Chemical (China) Ltd.**

Rm. 23rd F1, CITIC Building

19 Jianguomenwai Dajie

Beijing 100004

Tel: 86- 1 0-6593-9966

Fax: 86-10-6500-3914

Contact: Eric Chen

- Chemical Products

**6. Dow Corning China Ltd.**

Suite 8-D CITIC Building

19 Jianguomenwai Dajie

Beijing 100004

Tel: 86- 10-6500-305 1

Fax: 86-10-6504-5652

Contact: Kenneth Chan

- Silicone & silicone-related products

**7. Ford Foundation**

Rm. 50 1, International Club Office Tower

2 1, Jianguomenwai Ave.

Beijing 100020

Tel: 86-1 0- 6532-6668

Fax: 86-10-6532-5495

E-mail: [ford-beijing@fordfound.org](mailto:ford-beijing@fordfound.org)

Contact: Tony Saich

- Non-Profit

**8. Ford Motor (China) Ltd.**

3/F, West Wing

China World Trade Centre

1 Jianguomenwai Street

Beijing 100004

Tel: 86- 1 0-6505-2229

Fax: 86-10-6505-0610

Contact: Chang An Tien

Title: Director

Government Affairs

- . Auto

**9. GM Overseas Corp.**

Block C Guo Men Bldg. 4/F

1, Zuo Jia Zhuang

Beijing 100028

Tel: 86-10-6468-7788

Fax: 86-10-6468-7879

Contact: Larry Zahner

. Auto

**10. Haworth Furniture**

30/F, Silver Tower

2, Dong Sanhuan Bei Lu

Chaoyang Dist., Beijing 100027

Tel: 86-10-6410-6601/05

Fax: 86-10-6410-6671

E-mail: [lam.fung@haworthinc.com](mailto:lam.fung@haworthinc.com)

- Office Furniture

**11. ITT Industries**

Room 332, Great Wall Hotel

Beijing 100026

Tel: 86-10-6500-5566 \* 332

Fax: 86-10-6591-7871

Contact: Li Xiao Chong

Office Manager

- Auto Parts  
(ITT's headquarters is in NY, but has strong business in MI)

**12. ITW Beijing Office**

**ITW Balance Engineering**

Room B2008, Vantone New World Plaza

2, Fucheng Menwai Avenue

West Dist., Beijing, 100037

Tel: 86-10-6858-8116

Fax: 86-10-6858-8117

Contact: Lu Xiaoda

- Machine Tool  
(ITW's headquarters is in IL, but has strong business in MI)

**13. Western Atlas**

Lido Park Office Building  
Lido Holiday Inn Hotel  
Jichang Road, Jiang Tai Rd.  
Beijing 100004  
Tel: 86-10-6437-9858  
Fax: 86-10-6437-9857  
Contact: Steve Li  
Representative  
• Machine Tool

**14. Tarus Products, Inc.**

B22 Yingtai Mansion  
Xizhimen Wai, Beijing, P.R. China  
Tel: 86-10-6836-3311\*2187  
Fax: 86-10-8837-2711  
Email: [joinuscn@public.east.cn.net](mailto:joinuscn@public.east.cn.net)  
Contact: He Yilin  
• CNC Milling Machine, Drilling Machine, Coordinate Measuring & Scanning  
Machines



## **40 Michigan Companies Have Offices or Joint Ventures in China**

### **Other Michigan Companies in China**

#### **1. American Induction Heating Corporation**

Suite 3-A, Building A, Lane 299

FuDu Garden, XuanHua Road

Shanghai 200050

Tel: 86-21-6240-4128

Fax: 86-21-6240-4129

Contact: Gary Shen

Title: Director of Sales – Asian Pacific Rim

Representative Office

- Induction Heating Equipment and Repairing

#### **2. Amway (China) Co., Ltd.**

41/F Citic Plaza

#233 Tian He Road North

Guangzhou, Guangdong 510620

Tel: 86-20-8755-2368

Fax: 86-20-8755-4801/4802

Contact: Betty Yeung

Title: South China General Manager

- Personal Care Products

#### **3. Atlas Technologies**

Room 110, Heqiao Building

8A Guanghua Road

Beijing, China 100026

Tel: 86-10-6508-1717

- Software

#### **4. Comdumex, Inc.**

Rm. 40410, Beijing Friendship Hotel

Baishi Qiao Road, Beijing

Tel: 86-10-6849-8934

Fax: 86-10-6849-8935

Contact: Shuai Yu

Title: Manager-Asian Pacific Operations

Representative Office

- Cables & Wires for the Electrical and Telecommunications Industries

**5. CompuPacific International**

Rm. 206, ChuangXin Bldg.

Xi'an, Shanxi

Tel: 86-29-822-6388

Fax: 86-29-822-4628

E-mail: [ChinaSale@cpmpupacific.com](mailto:ChinaSale@cpmpupacific.com)

Contact: Michael Liu

Title: President

- Computer Programming & Software

**6. Dow Chemical (China) Ltd.**

Rm. 3605, CITIC Plaza, Tian He North Rd.

Guangzhu, Guangdong 5 10620

Tel: 86-20-8752-0383

Fax: 86-20-8752-0332

Contact: Michael Chow

Title: Manager

- Chemical Products

**7. Future Trends International (Group) Corp.**

Hong Ye Business Center 2-D

825 Zhao Jia Bang Road

Shanghai 200032

Tel: 86-21-6428-1396

Fax: 86-21-6428-1397

E-mail: [FTICHINA@public.sta.net.cn](mailto:FTICHINA@public.sta.net.cn)

Contact: Farzam Kamalabadi

Title: President

- Consulting

**8. General Motors Overseas Co., Shenyang Office**

No. 15- 1, Riverside Garden

215, Qingnian Street, Shenhe District

Shenyang, Liaoning 110005

Tel: 86-24-2384-6004

Fax: 86-24-2384-3423

E-mail: [Jeabell@pub.sy.lnpta.net.cn](mailto:Jeabell@pub.sy.lnpta.net.cn)

Contact: Ian Miller

Title: Managing Director

Representative Office

- Automotive

**9. Johnson Controls**

103, Beiheyuan Street  
Dongcheng Dist. Beijing 100006  
Tel: 86-10-6527-7731/32/34/35  
Fax: 86-10-6527-7730  
Contact: Sheng Weili

- Building Automation System

(Its Headquarters is in WI, but it has significant operation in MI)

**10. Johnson Controls International Inc. (GZ Office)**

Rm 3102, Tower 2, Dong Jun Plaza  
836 Dong Feng Road East  
Guangzhou, Guangdong 510060  
Tel: 86-20-8760-5881  
Fax: 86-20-8760-5735  
E-mail: shling@public.guangzhou.gd.cn  
Contact: S. H. Ling  
Title: General Manager

- Controls

(Its Headquarters is in WI, but it has significant operation in MI)

**11. Johnson Controls Systems & Equipment (Shenzhen)**

19/F, Block C, Tian An Int'l Building  
Renmin Nan Rd., Shenzhen, Guangdong 518005  
Fax: 86-755-229-5066  
Contact: Stephen Shang  
Title: General Manager

- Controls

(Its Headquarters is in WI, but it has significant operation in MI)

**12. Kellogg's (China) Ltd.**

Bei Wei Industrial District, GETDZ, Huangpu  
Guangzhou, Guangdong 510730  
Tel: 86-20-8221-1151  
Fax: 86-20-8221-7269  
E-mail: [dodie.cadiz@kellogg.com](mailto:dodie.cadiz@kellogg.com)  
Contact: Eduardo T. Cadiz Jr.  
Title: General Manager

- Cereal Breakfast Food & Convenience Food

**13. Pharmacia-Upjohn**

Rm. 823-825, Guanghua Changan Bldg.

7 Jiannei Dajie

East District, Beijing 10002 1

Tel: 86- 1 0-65 1 0-2978

Fax: 86- 1 0-65 1 0-2972

Contact: Lai Min

- Pharmaceuticals

(Its headquarters is in NJ, but it has significant holding in MI)

**14. Shanghai Songjiang Lear Automotive**

**Carpet & Acoustics Co., Ltd.**

279, Yu Shu Road

Cang Qiao Industrial Zone

Songjiang District, Shanghai 201600

Tel: 86-21-5772-7740 \* 201

Fax: 86-21-5772-7741

E-mail: [thomasliu@hotmail.com](mailto:thomasliu@hotmail.com)

Contact: Thomas A. Liu

Title: General Manager

- . Auto Parts

**15. Upjohn Suzhou Pharmaceutical Company, Ltd.**

180, Zhu Yuan Road

SND. Suzhou, Jiangsu 215011

Tel: 86-5 12-825-2990

Fax: 86-5 12-825-3669

Contact: LA Wells

Title: General Manager

Joint Venture

- Medical

(Its headquarters is in NJ, but it has significant holdings in MI)

**16. Upjohn Suzhou Animal Health Products Company, Ltd.**

180, Zhu Yuan Rd., SND. Suzhou

Suzhou., Jiangshu 2 150 11

Tel: 86-5 12-825-2990

Fax: 86-5 12-825-6549

Contact: RT Lee

Title: General Manager

Joint Venture

- Animal Health Products

(Its headquarters is in NJ, but it has significant holdings in MI)

**17. Walbro Corporation**

1) Tianjin Walbro Industries  
Tianjin, China

2) Fujian Hualong Carberator Co.  
Fuding, Fujian Province  
China  
Joint Venture

**18. Whirlpool (China) Co., Ltd. Guangzhou Office**

Rm. 2108-2110 Dongshan Plaza, 45 Xian Lie Zhong Rd.

Guangzhou, Guangdong 5 10080

Tel: 86-20-8732-1829/0647/4950

Fax: 86-20-8732-1900

Contact: Ms. Xu or Ms. Wang

- Household Appliances

**19. Whirlpool (China) Co., Ltd. Shenzhen Factory**

Ban Tian Industrial District, Bu Ji Town

Shenzhen, Guangdong 5 18 129

Tel: 86-755-889-0222

Fax: 86-755-889-0987

- Household Appliances

**20. Whirlpool (China) Co., Ltd. Shenzhen Office**

5/F West, 418 Hua Qiang North Rd.

Shenzhen, Guangdong 5 1803 1

Tel: 86-755-325-4888

Fax: 86-755-324-4962

- Household Appliances

**21. Wuxi Air-xi Gage Company**

No. 5-1 Hanjiang Road

Wuxi, Jiangsu Province 2 14028

Tel: 86-510-5213-088

Fax: 86-510-5213-688

Contact: Duan Hailian

Joint Venture

- Gage

**22. Z & P International Company**

3/F, No, 30, Hunan Road

Shanghai 20003 1

Tel: 86-2 1-6436-0543

Fax: 86-2 1-6474-2 152

Contact: Wang Jiuxia

Title: Chief Representative

Representative Office

- Consulting

**Federal Express is Requesting a Disproportionate Share of the Limited US-China Frequencies Available in the Proceeding - 82% Compared to a 22% All Cargo Share for the Transpacific Market**

	<u>Weekly Frequencies-April 1999</u>			Federal Express
	US-China	Transpacific	Transatlantic	US-China Proposal
U.S. All-Cargo Services	4	95	63	14
US Combination Services	23	333	1,012	3
Total	27	428	1,075	17
Percent All Cargo	14.8%	22.2%	5.9%	82.4%

Source: OAG Schedule Tapes, April 1999

## NW's Detroit Gateway Will Provide the Fastest Travel Times for 39 of the Top 50 US-Shanghai O&D Markets

SHA O&D Rank	US City	Shortest Elapsed Time		Cumulative Percent of US-SHA O&D Psgrs	
		DTW	SFO	DTW	SFO
1	New York	X		21.9%	0.0%
2	Chicago	X		34.1%	0.0%
3	Washington	X		42.7%	0.0%
4	Boston	X		48.1%	0.0%
5	Seattle/Tacoma		X	48.1%	4.5%
6	Houston		X	48.1%	8.1%
7	Atlanta	X		51.3%	8.1%
8	Dallas/Fort Worth		X	51.3%	11.1%
9	Minneapolis	X		54.2%	11.1%
10	Philadelphia	X		56.8%	11.1%
11	Denver		X	56.8%	13.0%
12	Cleveland	X		58.6%	13.0%
13	Miami	X		60.5%	13.0%
14	Portland		X	60.5%	14.6%
15	Orlando	X		62.0%	14.6%
16	St. Louis	X		63.3%	14.6%
17	Baltimore	X		64.6%	14.6%
18	San Diego		X	64.6%	15.8%
19	Rochester	X		65.8%	15.8%
20	Pittsburgh	X		67.0%	15.8%
21	Indianapolis	X		68.2%	15.8%
22	Raleigh/Durham	X		69.3%	15.8%
23	Cincinnati	X		70.3%	15.8%
24	Tampa	X		71.3%	15.8%
25	Phoenix		X	71.3%	16.7%



## NW's Detroit Gateway Will Provide the Fastest Travel Times for 39 of the Top 50 US-Shanghai O&D Markets

SHA O&D Rank US City	Shortest Elapsed Time		Cumulative Percent of US-SHA O&D Psgrs	
	DTW	SFO	DTW	SFO
26 Austin		X	71.3%	17.5%
27 Milwaukee	X		72.0%	17.5%
28 <b>Kansas City</b>	X		72.7%	17.5%
29 New Orleans		X	72.7%	18.2%
30 Charlotte	X		73.4%	18.2%
31 Columbus	X		74.1%	18.2%
32 Memphis	X		74.7%	18.2%
33 Hartford	X		75.4%	18.2%
34 Buffalo	X		75.9%	18.2%
35 Grand Rapids	X		76.5%	18.2%
36 Syracuse	X		77.0%	18.2%
37 Nashville	X		77.6%	18.2%
38 <b>Salt Lake City</b>		X	77.6%	18.7%
39 Jacksonville	X		78.0%	18.7%
40 Albany	X		78.4%	18.7%
41 Harrisburg	X		78.8%	18.7%
42 Richmond	X		79.1%	18.7%
43 <b>Dayton</b>	X		79.5%	18.7%
44 Greensboro	X		79.8%	18.7%
45 Sacramento		X	79.8%	19.0%
46 <b>Greenville/Spartanburg</b>	X		80.0%	19.0%
47 Birmingham	X		80.3%	19.0%
48 Louisville	X		80.5%	19.0%
49 Des Moines	X		80.8%	19.0%
50 <b>Saginaw</b>	X		81.0%	19.0%
Total Top 50	39	11	81.0%	19.0%

Note: Excludes Gateways: San Francisco, Los Angeles, Detroit and Non-Mainland Points: Hawaii, Guam and other US Pacific Territories. Shortest elapsed time based on travel in both directions.

Source: US DOT, O&D Database, YE 3Q 7998 and OAG Schedule Tapes, May 7999

**Connections on Northwest via Detroit Provide Better Elapsed Times  
from New York State to Shanghai than United's SFO Proposal**

	Depart	First Conned	Arrive	Depart	Second Connect	Arrive	Depart	Arrive SHA 1/	Elapsed Time
<b>Northwest</b>									
Albany	06:15	Detroit	07:58	12:30				15:25 + 1	21:10
	09:15	Detroit	10:57	12:30				15:25 + 1	<b>18:10</b>
Binghamton	09:15	Detroit	10:57	15:25	Narita	17:15 +1	18:35	20:40	23:25
	05:40	Detroit	08:10	12:30				15:25 + 1	21:45
Buffalo	08:40	Detroit	11:10	12:30				15:25 + 1	<b>18:45</b>
	08:40	Detroit	11:10	15:25	Narita	17:15 +1	18:35	20:40	24:00
	06:45	Detroit	07:51	12:30				15:25 + 1	20:40
	10:20	Detroit	11:29	12:30				15:25 + 1	<b>17:05</b>
	10:20	Detroit	11:29	15:25	Narita	17:15 +1	18:35	20:40	22:20
	12:55	Detroit	14:04	15:25	Narita	17:15 +1	18:35	20:40	19:45
Elmira/Corning	06:25	Detroit	08:10	12:30				15:25 + 1	21:00
	09:25	Detroit	11:10	12:30				15:25 + 1	<b>18:00</b>
New York JFK	09:25	Detroit	11:10	15:25	Narita	17:15 +1	18:35	20:40	23:15
	06:05	Detroit	08:02	12:30				15:25 + 1	21:20
	09:00	Detroit	11:09	12:30				15:25 + 1	<b>18:25</b>
	09:00	Detroit	11:09	15:25	Narita	17:15 +1	18:35	20:40	23:40
New York LGA	06:10	Detroit	08:05	12:30				15:25 + 1	21:15
	07:40	Detroit	09:41	12:30				15:25 + 1	19:45
	09:29	Detroit	11:30	12:30				15:25 + 1	<b>17:56</b>
	09:29	Detroit	11:30	15:25	Narita	17:15 +1	18:35	20:40	23:11
	11:05	Detroit	13:05	15:25	Narita	17:15 +1	18:35	20:40	21:35
	12:48	Detroit	14:40	15:25	Narita	17:15 +1	18:35	20:40	19:52
Rochester	06:35	Detroit	07:47	12:30				15:25 + 1	20:50
	10:10	Detroit	11:26	12:30				15:25 + 1	<b>17:15</b>
	10:10	Detroit	11:26	15:25	Narita	17:15 +1	18:35	20:40	22:30
	12:35	Detroit	14:10	15:25	Narita	17:15 +1	18:35	20:40	20:05
Syracuse	06:20	Detroit	07:48	12:30				15:25 + 1	21:05
	09:20	Detroit	10:45	12:30				15:25 + 1	<b>18:05</b>
	09:20	Detroit	10:45	15:25	Narita	17:15 +1	18:35	20:40	23:20
	12:35	Detroit	14:07	15:25	Narita	17:15 +1	18:35	20:40	20:05
Westchester	06:15	Detroit	08:00	12:30				15:25 + 1	21:10
	09:30	Detroit	11:22	12:30				15:25 + 1	<b>17:55</b>
	09:30	Detroit	11:22	15:25	Narita	17:15 +1	18:35	20:40	23:10
	12:40	Detroit	14:28	15:25	Narita	17:15 +1	18:35	20:40	20:00

**United**

Albany	06:04	Chicago	07:15	08:00	San Francisco	10:28	11:25	15:25 + 1	<b>21:21</b>
Binghamton	No Connecting Service								
Buffalo	06:45	Chicago	07:19	08:00	San Francisco	10:28	11:25	15:25 + 1	<b>20:40</b>
Elmira/Corning	No United Service								
New York JFK	07:00	San Francisco	10:12	11:25				15:25 + 1	<b>20:25</b>
New York LGA	06:00	Chicago	07:10	08:00	San Francisco	10:28	11:25	15:25 + 1	<b>21:25</b>
Rochester	06:15	Chicago	06:57	08:00	San Francisco	10:28	11:25	15:25 + 1	<b>21:10</b>
Syracuse	No Connecting Service								
Westchester	No Connecting Service								

1\ Shanghai time difference is 72 hours

## Northwest's DTW Gateway Provides Shorter Elapsed Travel Time for 10 of United's Nonstop SFO Markets, Including Washington

Market	Travel Times		Northwest Time Advantage (Disadvantage)
	NW Via DTW	UA Via SFO	

---

**Westbound**

Philadelphia	17:50	20:25	02:35
New York Newark	17:55	20:25	02:30
Baltimore	17:55	20:25	02:30
Hartford	18:10	20:25	02:15
<b>Washington Dulles</b>	<b>17:55</b>	<b>19:55</b>	<b>02:00</b>
Chicago O'Hare	17:25	19:25	02:00
Boston	18:35	20:20	01:45
Atlanta	17:45	19:25	01:40
Orlando	19:05	20:15	01:10
Miami	19:25	20:15	00:50

**Eastbound**

Philadelphia	17:23	18:40	01:17
New York Newark	17:31	18:46	01:15
Baltimore	17:32	21:11	03: 39
Hartford	19:02	18:54	(00:08)
<b>Washington Dulles</b>	<b>19:07</b>	<b>22:15</b>	<b>03:08</b>
Chicago O'Hare	17:29	17:19	(00: 10)
Boston	19:31	19:23	(00:08)
Atlanta	18:20	17:50	(00:30)
Orlando	18:14	21:49	03:35
Miami	18:59	21:32	02:33

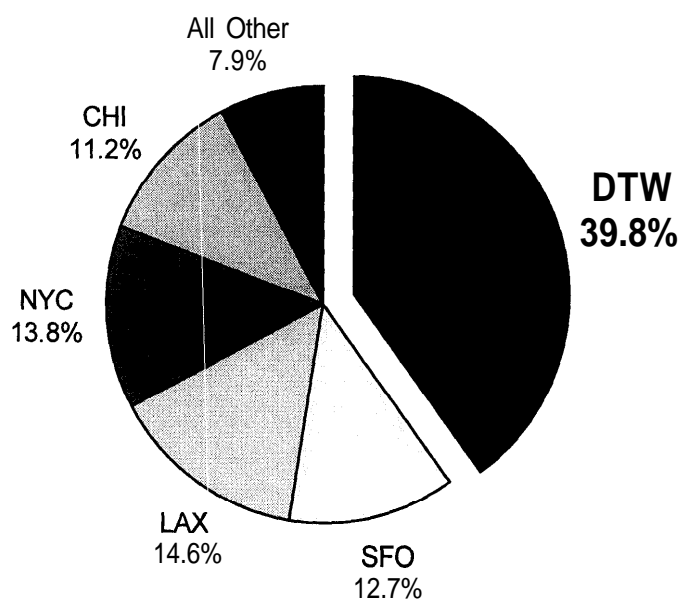
**Northwest's DTW Gateway Provides Shorter Elapsed  
Travel Time for 10 of United's Nonstop SFO Markets,  
Including Washington**

Market	Travel Times		Northwest Time Advantage (Disadvantage)
	NW	UA	
	Via DTW	Via SFO	
<hr/>			
<b><u>Total</u></b>			
Philadelphia			03:52
New York Newark			03:45
Baltimore			06: 09
Hartford			02: 07
<b>Washington Dulles</b>			<b>05:08</b>
Chicago O'Hare			01:50
Boston			01:37
Atlanta			01:10
Orlando			04:45
Miami			03:23

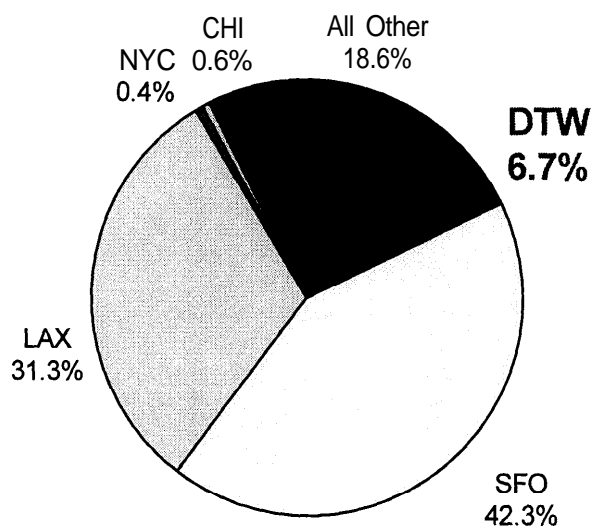
*Source: OA G Schedules*

**Detroit is the Preferred Gateway for US-China O&D  
Passengers  
in the Eastern and Midwestern States**

**Eastern/Midwestern States**



**Western States**



Note: Excludes Non-Mainland Points: Hong Kong, Hawaii, Guam and Other U.S. Pacific Territories

Source: U.S. DOT, O&D Databases, YE 3Q 1998

## Detroit is the Preferred Gateway for US-China O&D Passengers in the Eastern and Midwestern States

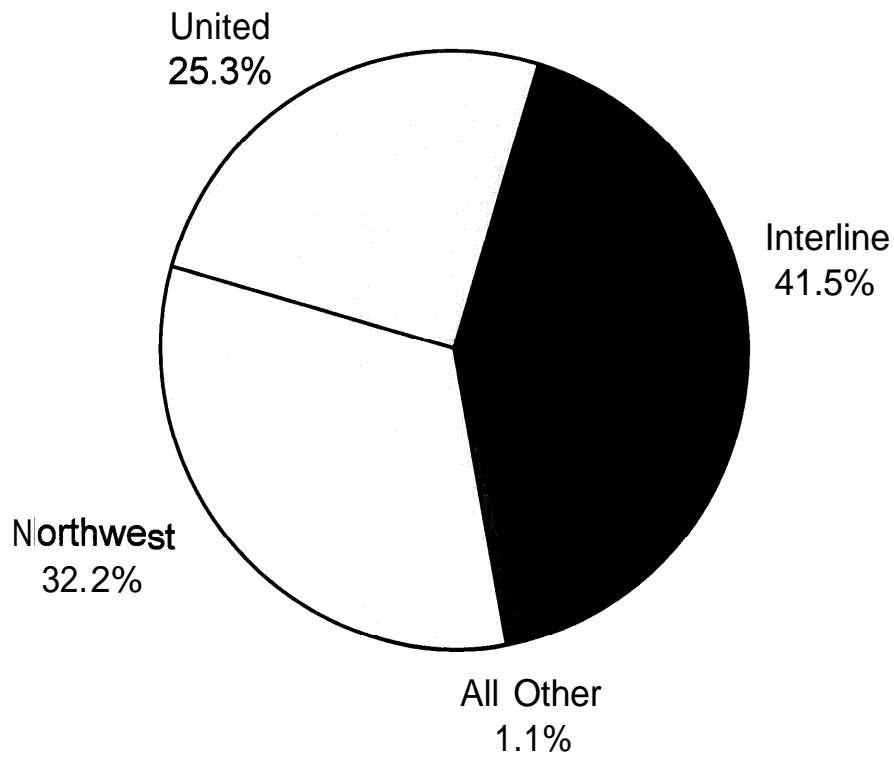
State	China O&D Passengers by US Gateway					
	DTW	SFO	LAX	NYC	CHI	All Other
<b>States More Conveniently Served by NW/Detroit</b>						
New York	22.8%	12.4%	11.9%	45.6%	4.2%	3.1%
Illinois	24.6%	12.4%	18.2%	1.2%	39.2%	4.3%
Michigan	81.3%	3.5%	5.2%	1.0%	4.3%	4.8%
District of Columbia	33.4%	18.5%	20.7%	10.1%	9.5%	7.7%
Florida	33.1%	19.6%	27.7%	4.2%	5.2%	10.3%
Massachusetts	36.0%	20.1%	21.1%	9.4%	7.1%	6.4%
Pennsylvania	47.2%	12.9%	9.8%	8.8%	16.7%	4.6%
Minnesota	56.8%	4.2%	7.9%	1.3%	3.6%	26.2%
Ohio	49.1%	8.8%	14.0%	1.7%	17.0%	9.3%
Georgia	32.4%	18.3%	22.4%	2.0%	6.3%	18.6%
Missouri	42.0%	20.7%	19.4%	0.8%	9.0%	8.0%
North Carolina	50.0%	8.6%	11.8%	4.4%	17.4%	7.7%
Tennessee	46.7%	8.5%	18.6%	2.2%	7.8%	16.3%
Wisconsin	61.3%	5.0%	4.0%	0.2%	12.3%	17.1%
Indiana	53.6%	13.4%	8.8%	1.4%	16.5%	6.4%
Maryland	47.5%	15.7%	10.7%	13.2%	7.4%	5.5%
Louisiana	40.4%	24.7%	19.1%	0.8%	3.4%	11.6%
Virginia	52.4%	7.5%	11.0%	6.6%	18.2%	4.2%
Connecticut	43.7%	11.5%	5.4%	8.8%	23.1%	7.5%
Iowa	41.6%	11.0%	11.9%	0.4%	20.1%	15.0%
Oklahoma	20.5%	22.3%	26.9%	2.6%	2.7%	24.9%
Alabama	32.2%	16.7%	26.0%	0.0%	6.8%	18.3%
Kentucky	65.3%	7.7%	15.2%	0.7%	3.4%	7.7%
South Carolina	39.5%	4.5%	27.5%	4.6%	1.5%	22.3%
Rhode Island	56.2%	4.5%	5.9%	11.3%	22.0%	0.0%
Arkansas	30.0%	14.0%	14.6%	0.0%	3.5%	37.9%
Mississippi	49.1%	4.1%	19.0%	0.0%	0.0%	27.7%
Kansas	18.0%	34.3%	11.0%	0.0%	25.9%	10.8%
West Virginia	55.1%	14.0%	7.5%	6.8%	9.9%	6.5%
New Hampshire	23.1%	4.0%	15.5%	0.0%	53.4%	4.0%
Maine	19.3%	22.5%	0.0%	0.0%	49.1%	9.2%
Vermont	56.8%	5.4%	0.0%	10.8%	16.2%	10.8%
New Jersey	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Nebraska	34.5%	17.0%	22.0%	1.1%	16.4%	9.1%
North Dakota	44.0%	25.6%	3.0%	0.0%	6.0%	21.4%
South Dakota	63.4%	13.1%	10.4%	0.0%	2.6%	10.4%
<b>Subtotal NW</b>	<b>39.8%</b>	<b>12.7%</b>	<b>14.6%</b>	<b>13.8%</b>	<b>11.2%</b>	<b>7.9%</b>

## Detroit is the Preferred Gateway for US-China O&D Passengers in the Eastern and Midwestern States

State	China O&D Passengers by US Gateway					
	DTW	SFO	LAX	NYC	CHI	All Other
<b>States More Conveniently Served by UA/San Francisco</b>						
California	0.5%	47.0%	37.9%	0.5%	0.1%	14.0%
Texas	24.8%	34.5%	22.2%	0.5%	1.6%	16.4%
Washington	0.4%	29.0%	11.5%	0.3%	0.2%	58.6%
Colorado	13.0%	51.7%	29.7%	0.2%	0.5%	5.0%
Oregon	0.0%	47.6%	23.3%	0.0%	0.0%	29.1%
Arizona	1.5%	36.7%	52.0%	0.0%	1.9%	7.9%
Utah	0.5%	44.7%	36.3%	0.5%	2.0%	16.0%
Nevada	0.6%	41.4%	49.6%	0.0%	0.7%	7.7%
Nebraska	34.5%	17.0%	22.0%	1.1%	16.4%	9.1%
New Mexico	16.9%	17.4%	38.1%	0.0%	0.0%	27.5%
Idaho	11.0%	0.0%	69.3%	0.0%	2.2%	17.5%
South Dakota	10.4%	33.4%	13.1%	0.0%	2.6%	10.4%
North Dakota	3.0%	44.0%	25.6%	0.0%	6.0%	21.4%
Montana	18.6%	35.9%	0.0%	0.0%	0.0%	45.5%
Wyoming	0.0%	70.0%	10.0%	0.0%	0.0%	20.0%
<b>Subtotal UA</b>	6.7%	42.3%	31.3%	0.4%	0.6%	18.6%
<b>Grand Total</b>	2 29.0%	3 %	20.0%	9.5%	7.8%	12.7%

Note: Excludes Non-Mainland Points: Hong Kong, Hawaii, Guam and other US Pacific Territories  
Box indicates gateway with highest passenger share.

**Northwest Serves More of the U.S.-China Markets With its  
Nine Frequencies than United Does With its 14**



**Note:** Excludes Non-Mainland Points: Hong Kong, Hawaii, Guam and Other U.S. Pacific Territories

**Source:** U.S. DOT, O&D Databases, YE 3Q 1998



## **Northwest's Existing Load Factor to China from DTW Is Better Than United's from SFO**

Market	Carrier	Passengers	Seats	Load Factor
DTW-PEK	NW	20,373	25,916	78.6%
SFO-NRT - PEK/SHA	UA	58,588	81,602	71.8%

*Source: US DOT T-700 Database, 2Q98*

# Northwest's Code Share With Air China at SFO and LAX Is Not a Substitute for Service from a Northwest Hub

Northwest has Limited Feed at SFO & LAX Compared to Detroit

<u>Gateway/Market</u>	<u>Northwest Daily Nonstop Service - May '99</u>	
	<u>Departures</u>	<u>Seats</u>
<b><u>San Francisco</u></b>		
Minneapolis	7	1,325
Detroit	4	912
Memphis	<u>2</u>	<u>300</u>
Total	13	2,537
<b><u>Los Angeles</u></b>		
Minneapolis	7	1,501
Detroit	5	1,096
Memphis	3	484
Las Vegas	<u>1</u>	<u>150</u>
Total	16	3,231
<b>Total SFO &amp; LAX</b>	<b>29</b>	<b>5,768</b>
<b>Total Detroit</b>	<b>530</b>	<b>56,739</b>

Source: OAG Schedule Tapes, May 7999

## Northwest Serves More Markets from Its Detroit Hub Than United Does at San Francisco

Market	Daily Nonstop Service							
	NW at DTW		UA at SFO		Difference		% Difference	
	Depts.	Seats	Depts.	Seats	Depts.	Seats	Depts.	Seats
<hr/>								
<u>Domestic</u>								
Jet	340	44,901	228	34,420	112	10,481	49%	30%
Commuter	161	6,645	86	2,580	75	4,065	87%	158%
Total	501	51,546	314	37,000	187	14,546	60%	39%
<u>International</u>	29	5,193	14	3,840	15	1,353	107%	35%
Total	530	56,739	328	40,840	202	15,899	62%	39%

Source: OAG Schedule Tapes, May 1999

## Northwest Serves More Markets from Its Detroit Hub Than United Does at San Francisco

### NW's Nonstop Daily Departures and Seats at DTW

Market	Nonstop Daily Depts.	Available Seats
<b><u>Domestic Jet</u></b>		
Minneapolis	14	2,425
Orlando	8	1,467
New York La Guardia	9	1,416
Washington National	10	1,380
Boston	8	1,362
Baltimore	8	1,292
Chicago O'Hare	9	1,284
Seattle/Tacoma	6	1,280
Los Angeles	6	1,246
New York Newark	8	1,196
Indianapolis	9	1,186
Milwaukee	7	1,096
Memphis	8	1,086
Philadelphia	8	1,042
Atlanta	9	1,036
Grand Rapids	8	984
San Francisco	5	957
Nashville	8	844
<b>Tampa</b>	5	814
Las Vegas	4	736
Hartford	5	696
Miami	5	688
Chicago Midway Apt	6	646
St Louis	6	644
Phoenix	4	630
Lansing	5	614
<b>Dallas/Fort Worth</b>	6	600
Kansas City	5	594
Madison	5	566
Raleigh/Durham	5	566
Buffalo	5	544
Charlotte	5	522

## Northwest Serves More Markets from Its Detroit Hub Than United Does at San Francisco

### NW's Nonstop Daily Departures and Seats at DTW

Market	Nonstop Daily Depts.	Available Seats
Washington Dulles	5	522
Norfolk	4	512
Syracuse	5	500
Columbus	5	500
Saginaw	5	500
Flint	4	492
Albany	4	466
Denver	3	450
Cleveland	4	446
Fort Lauderdale	3	438
Richmond	4	400
Greenville/Spartanburg, SC	4	400
Providence	4	400
Manchester	4	400
Fort Myers	2	368
New Orleans	3	366
Rochester	4	356
Jacksonville	3	344
Portland, OR	2	334
New York J F Kennedy	3	322
Allentown, PA	3	300
Houston Intercontinental	3	300
Westchester County	3	300
Reno	2	300
Louisville	3	300
Orange County	2	300
Traverse City	3	300
San Diego	2	300
Houston	3	300
Green Bay	3	278
Greensboro	3	256
West Palm Beach	2	250
Harrisburg	2	222
Birmingham	2	200
Kalamazoo	2	200
South Bend	2	200
Anchorage	1	184
Pittsburgh	2	178
Sarasota	1	100
Knoxville	1	100
Fort Wayne	<b>1</b>	<b>78</b>
Subtotal	340	44,901

## Northwest Serves More Markets from Its Detroit Hub Than United Does at San Francisco

### NW's Nonstop Daily Departures and Seats at DTW

<b>Market</b>	<b>Nonstop Daily Depts.</b>	<b>Available Seats</b>
<b><u>Domestic Commuter</u></b>		
Cincinnati	7	375
Cleveland	6	306
Pittsburgh	6	306
Kalamazoo	7	303
Fort Wayne	7	303
Dayton	6	270
Lexington	4	240
Toledo Express Apt	7	231
Duluth	3	207
Saginaw	4	204
South Bend	5	201
Flint	6	198
Columbus	3	171
Muskegon	5	165
Appleton	5	165
Erie	5	165
Des Moines	2	138
Westchester County	2	138
Green Bay	2	138
Evansville	4	132
Roanoke	4	132
Bloomington-Normal, IL	4	132
Rockford	4	132
Akron/Canton, OH	4	132
Lansing	4	132
Wausau	4	132
Traverse City	4	132
Champaign	4	132
Louisville	2	102
Knoxville	2	102
Harrisburg	2	102
Allentown, PA	2	102
Marquette County Apt	3	99
Alpena	3	99
Charleston	3	99
Pellston	3	99
State College	3	99
Elmira/Corning	2	66
Rochester	2	66
Binghamton	2	66
Youngstown		33
Benton Harbor	1	33
Buffalo	1	33
Lafayette	<u>1</u>	33
Subtotal	161	6,645

## Northwest Serves More Markets from Its Detroit Hub Than United Does at San Francisco

### NW's Nonstop Daily Departures and Seats at DTW

Market	Nonstop Daily Depts.	Available Seats
<b><u>International Jet</u></b>		
Amsterdam	2	820
Tokyo	2	807
Toronto	5	780
Montreal	4	466
Beijing	1	410
Osaka	1	410
Frankfurt	1	289
Paris	1	289
London	1	289
Mexico City	1	150
Vancouver	<u>1</u>	<u>150</u>
Subtotal	20	4,860
<b><u>International Commuter</u></b>		
London, Ontario	4	132
Ottawa	4	132
Montreal	<u>1</u>	<u>69</u>
Subtotal	9	333
'Total	530	56,739

Source: OAG Schedule Tapes, May 1999

## Northwest Serves More Markets from Its Detroit Hub Than United Does at San Francisco

### UA's Nonstop Daily Departures and Seat at SFO

Market	Nonstop Daily Depts.	Available Seats
<b><u>Domestic Jet</u></b>		
Los Angeles	37	4,436
Denver	14	3,204
Chicago O'Hare	12	2,753
Washington Dulles	9	1,714
San Diego	14	1,712
Seattle/Tacoma	15	1,680
New York J F Kennedy	8	1,640
Burbank	14	1,612
Boston	8	1,576
Las Vegas	11	1,348
Honolulu	4	1,265
Orange County	7	1,252
New York Newark	7	1,200
Portland, OR	10	1,160
Phoenix	7	816
Ontario	6	728
Reno	5	600
Eugene	5	560
Kahului	2	486
Santa Barbara	4	452
Boise	4	432
Philadelphia	3	432
Salt Lake City	3	384
Monterey Peninsula, CA	2	376
Baltimore	2	376
Medford	3	344
Spokane	3	324
Kona	1	287
Miami	1	208
Orlando	1	188
Houston intercontinental	1	188
Dallas/Fort Worth	1	147
Atlanta	1	144
New Orleans	1	144
Austin	1	128
Hartford	<u>1</u>	<u>124</u>
Subtotal	228	34,420



## Northwest Serves More Markets from Its Detroit Hub Than United Does at San Francisco

### UA's Nonstop Daily Departures and Seat at SFO

Market	Nonstop Daily Depts.	Available Seats
<b><u>Domestic Commuter</u></b>		
Sacramento	16	480
Fresno Air Terminal	16	480
Arcata/Eureka, CA	10	300
Redding	8	240
Chico	6	180
Monterey Peninsula, CA	6	180
San Luis Obispo	6	180
Bakersfield	5	150
Modesto	5	150
Redmond/Bend	3	<b>90</b>
Santa Rosa	2	60
Palm Springs	2	60
Crescent City	<u>1</u>	<u>30</u>
Subtotal	86	2,580
<b><u>International Jet</u></b>		
Tokyo	2	708
London	2	574
Hong Kong	1	391
Sydney	1	391
Chiang Kai Shek	1	391
Osaka	1	391
Vancouver	2	291
Paris	1	287
Mexico City	1	144
Toronto	1	144
Calgary	<u>1</u>	<u>128</u>
Subtotal	14	3,840
Total	328	40,840

Source: OAG Schedule Tapes, May 1999

## **The Detroit Gateway Serves More Potential Behind Points than the San Francisco Gateway**

***These NW/DTW Cities Represent 9% More of the  
US-China O&D Market than UA/SFO Cities***

Gateway	No. of Non-Circuitous Online Connecting Markets /1	O&D Passenger Index (SFO =100)
Detroit	82	109
San Francisco	38	100

/1 Based on 20% or less circuitry. Includes regional feeder markets

Note: **Excludes** Non-Mainland Points: Hong Kong, Hawaii, Guam and  
other US Pacific Territories

Source: OAG Schedule Tapes, May 1999 and US DOT, O&D Survey, YE 3Q 1998

## The Detroit Gateway Serves More Potential Behind Points than the San Francisco Gateway

### Northwest China via Detroit

US-China Psg'r Rank	O&D Market /1	Nonstop SHA Miles	Mileage via Detroit		Added Miles	Mileage Circuitry
			DTW-SHA to DTW	Total		
1	New York	7,368	7,120	486	7,606	3.2%
2	Chicago	7,056	7,120	236	7,356	4.3%
3	Washington	7,446	7,120	394	7,514	0.9%
4	Boston	7,290	7,120	621	7,741	6.2%
5	Houston	7,589	7,120	1,103	8,223	8.4%
6	Minneapolis	6,745	7,120	531	7,651	13.4%
7	Dallas/Fort Worth	7,345	7,120	996	8,116	10.5%
8	Atlanta	7,649	7,120	603	7,723	1.0%
9	Philadelphia	7,409	7,120	446	7,566	2.1%
10	Miami	8,243	7,120	1,152	8,272	0.4%
11	Orlando	8,043	7,120	956	8,076	0.4%
12	Cleveland	7,202	7,120	92	7,212	0.1%
13	Pittsburgh	7,291	7,120	198	7,318	0.4%
14	Baltimore	7,434	7,120	403	7,523	1.2%
15	St. Louis	7,187	7,120	450	7,570	5.3%
16	Cincinnati	7,300	7,120	238	7,358	0.8%
17	Raleigh/Durham	7,618	7,120	502	7,622	0.1%
18	Indianapolis	7,223	7,120	241	7,361	1.9%
19	Memphis	7,423	7,120	619	7,739	4.3%
20	Kansas City	7,054	7,120	636	7,756	10.0%
21	Columbus	7,276	7,120	161	7,281	0.1%
22	Hartford	7,315	7,120	541	7,661	4.7%
23	Milwaukee	6,985	7,120	243	7,363	5.4%
24	New Orleans	7,723	7,120	936	8,056	4.3%
25	Tampa	8,053	7,120	991	8,111	0.7%

## The Detroit (Gateway Serves More Potential Behind Points than the San Francisco Gateway

### Northwest China via Detroit

US-China Psg'r Rank	O&D Rank	NW Nonstop Detroit Market /1	Nonstop SHA Miles	Mileage via Detroit		Added Miles	Mileage Circuitry	
				DTW-SHA to DTW	Total			
26		Rochester	7,159	7,120	285	7,405	246	3.4%
27		Charlotte	7,634	7,120	517	7,637	3	0.0%
28		Buffalo	7,155	7,120	230	7,350	195	2.7%
29		Syracuse	7,180	7,120	362	7,482	302	4.2%
30		Nashville	7,439	7,120	466	7,586	147	2.0%
31		Des Moines	6,936	7,120	540	7,660	724	10.4%
32		Richmond	7,536	7,120	454	7,574	38	0.5%
33		Madison	6,944	7,120	318	7,438	494	7.1%
34		Jacksonville	7,910	7,120	820	7,940	30	0.4%
35		Dayton	7,255	7,120	175	7,295	40	0.6%
36		Fort Lauderdale/Hollywood	8,229	7,120	1,135	8,255	26	0.3%
37		Greensboro	7,582	7,120	462	7,582	0	0.0%
38		Louisville	7,332	7,120	315	7,435	103	1.4%
39		Harrisburg	7,365	7,120	364	7,484	119	1.6%
40		Birmingham	7,598	7,120	634	7,754	156	2.1%
41		West Palm Beach	8,190	7,120	1,093	8,213	23	0.3%
42		Saginaw	7,025	7,120	95	7,215	190	2.7%
43		Knoxville	7,520	7,120	450	7,570	50	0.7%
44		Greenville/Spartanburg	7,616	7,120	514	7,634	18	0.2%
45		Lansing	7,063	7,120	78	7,198	135	1.9%
46		Norfolk	7,593	7,120	526	7,646	53	0.7%
47		Roanoke	7,502	7,120	384	7,504	2	0.0%
48		Providence	7,328	7,120	603	7,723	395	5.4%
49		Lexington	7,366	7,120	305	7,425	59	0.8%
50		Fort Myers	8,157	7,120	1,089	8,209	52	0.6%
51		Allentown/Bethlehem	7,354	7,120	416	7,536	182	2.5%

## The Detroit (Gateway Serves More Potential Behind Points than the San Francisco Gateway

### Northwest China via Detroit

US-China Psg'r Rank	O&D Rank	NW Nonstop Detroit Market /1	Nonstop SHA Miles	Mileage via Detroit		Added Miles	Mileage Circuitry	
				DTW-SHA to DTW	Total			
52		State College	7,311	7,120	294	7,414	103	1.4%
53		South Bend	7,097	7,120	165	7,285	188	2.6%
54		Kalamazoo	7,079	7,120	121	7,241	162	2.3%
55		Green Bay	6,884	7,120	289	7,409	525	7.6%
56		Erie	7,188	7,120	154	7,274	86	1.2%
57		Appleton	6,892	7,120	294	7,414	522	7.6%
58		Akron/Canton	7,242	7,120	132	7,252	10	0.1%
59		Champaign	7,158	7,120	308	7,428	270	3.8%
60		Elmira/Corning	7,238	7,120	325	7,445	207	2.9%
61		Flint	7,068	7,120	52	7,172	104	1.5%
62		Manchester	7,247	7,120	598	7,718	471	6.5%
63		Lafayette	7,165	7,120	234	7,354	189	2.6%
64		Duluth	6,650	7,120	541	7,661	11011	15.2%
65		Charleston	7,404	7,120	285	7,405		0.0%
66		Fort Wayne	7,166	7,120	138	7,258	92	1.3%
67		Traverse City	6,920	7,120	205	7,325	405	5.9%
68		San Juan	8,968	7,120	1,932	9,052	84	0.9%
69		Westchester County	7,348	7,120	496	7,616	268	3.6%
70		Toledo	7,155	7,120	59	7,179	24	0.3%
71		Marquette	6,768	7,120	362	7,482	714	10.5%
72		Youngstown	7,234	7,120	148	7,268	34	0.5%
73		Evansville	7,300	7,120	374	7,494	194	2.7%
74		Wausau	6,833	7,120	366	7,486	653	9.6%
75		Binghamton	7,243	7,120	368	7,488	245	3.4%
76		Sarasota/Bradenton	8,088	7,120	1,030	8,150	62	0.8%
77		Rockford	7,005	7,120	302	7,422	417	6.0%
78		Pellston	6,882	7,120	238	7,358	476	6.9%
79		Bloomington-Normal	7,115	7,120	323	7,443	328	4.6%
80		Grand Rapids	7,039	7,120	124	7,244	205	2.9%
81		Albany	7,234	7,120	478	7,598	364	5.0%
82		Muskegon	7,006	7,120	165	7,285	279	4.0%

/1 Based on 20% or less circuity. Includes regional feeder markets

Note: Sorted in descending order by US-China O&D Passengers

Excludes Non-Mainland Points: Hong Kong, Hawaii, Guam and other US Pacific Territories

Source: OAG Schedule Tapes and US DOT, O&D Survey

## The Detroit Gateway Serves More Potential Behind Points than the San Francisco Gateway

### United China via San Francisco

US-China O&D Psg'r Rank	UA Nonstop San Francisco Market /1	Nonstop SHA Miles	Mileage via Detroit			Added Miles	Mileage Circuity
			SFO-SHA	to SFO	Total		
1	New York	7,368	6,152	2,564	8,716	1,348	18.3%
2	Los Angeles	6,485	6,152	336	6,488	3	0.0%
3	Chicago	7,056	6,152	1,848	8,000	944	13.4%
4	Washington	7,446	6,152	2,427	8,579	1,133	15.2%
5	Houston	7,589	6,152	1,644	7,796	207	2.7%
6	Seattle/Tacoma	5,720	6,152	679	6,831	1,111	19.4%
7	Dallas/Fort Worth	7,345	6,152	1,460	7,612	267	3.6%
8	Atlanta	7,649	6,152	2,132	8,284	635	8.3%
9	Philadelphia	7,409	6,152	2,513	8,665	1,256	17.0%
10	Denver	6,705	6,152	952	7,104	399	6.0%
11	Miami	8,243	6,152	2,579	8,731	488	5.9%
12	Orlando	8,043	6,152	2,434	8,586	543	6.8%
13	Baltimore	7,434	6,152	2,449	8,601	1,167	15.7%
14	Portland	5,791	6,152	550	6,702	911	15.7%
15	San Diego	6,594	6,152	446	6,598	4	0.1%
16	Phoenix	6,773	6,152	648	6,800	27	0.4%
17	Austin	7,472	6,152	1,495	7,647	175	2.3%
18	Hartford	7,315	6,152	2,621	8,773	1,458	19.9%
19	New Orleans	7,723	6,152	1,906	8,058	335	4.3%
20	Salt Lake City	6,408	6,152	597	6,749	341	5.3%
21	Sacramento	6,148	6,152	77	6,229	81	1.3%
22	Boise	6,118	6,152	522	6,674	556	9.1%
23	Orange County	6,521	6,152	371	6,523	2	0.0%
24	Spokane	5,880	6,152	732	6,884	1,004	17.1%
25	Eugene	5,832	6,152	451	6,603	771	13.2%
26	Santa Barbara	6,402	6,152	261	6,413	11	0.2%
27	Reno	6,173	6,152	191	6,343	170	2.8%
28	Fresno	6,300	6,152	156	6,308	8	0.1%
29	Las Vegas	6,518	6,152	412	6,564	46	0.7%
30	San Luis Obispo	6,332	6,152	190	6,342	10	0.2%
31	O ntario	6,515	6,152	363	6,515	0	0.0%
32	Medford	5,922	6,152	329	6,481	559	9.4%
33	Monterey	6,219	6,152	76	6,228	9	0.1%
34	Bakersfield	6,389	6,152	237	6,389	0	0.0%
35	Palm Springs	6,571	6,152	419	6,571	0	0.0%
36	Modesto	6,209	6,152	76	6,228	19	0.3%
37	Arcata/Eureka	5,933	6,152	250	6,402	469	7.9%
38	Redmond	5,904	6,152	462	6,614	710	12.0%

/1 Based on 20% or less circuity. Includes regional feeder markets

Note: Sorted in descending order by US-China O&D Passengers

**Excludes** Non-Mainland Points: Hong Kong, Hlaw aii, Guam and other US Pacific Territories

Source: OAG Schedule Tapes and US DOT, O&D Survey

## 84 of Northwest's 99 Domestic Nonstop Detroit Markets Would Be Better Served Over Detroit than San Francisco

Including the New York and Washington Airports,  
2 of the Largest U.S.- China O&D Markets

Nonstop NW Market	Via DTW Percent Circuity	Mles Via DTW	Mles Via SFO	DTW Mles Advantage (Disadvantage)
Erie	1. 4%	7, 286	8, 387	1, 101
Elmira/Corning	3. 0%	7, 458	8, 558	1, 100
Westchester County	3. 8%	7, 628	8, 728	1, 100
New York La Guardia	3. 5%	7, 623	8, 723	1, 100
New York Newark	3. 3%	7, 610	8, 709	1, 099
Hartford	4. 9%	7, 672	8, 771	1, 099
Providence	5. 6%	7, 736	8, 835	1, 099
New York J F Kennedy	3. 4%	7, 631	8, 730	1, 099
Binghanton	3. 6%	7, 502	8, 600	1, 098
Allentown, PA	2. 6%	7, 548	8, 645	1, 097
Boston	6. 4%	7, 754	8, 848	1, 094
State College	1. 5%	7, 424	8, 517	1, 093
Albany	5. 2%	7, 612	8, 703	1, 091
Youngstown	0. 6%	7, 277	8, 368	1, 091
Harrisburg	1. 7%	7, 486	8, 576	1, 090
Buffalo	2. 9%	7, 364	8, 454	1, 090
Philadelphia	2. 3%	7, 576	8, 665	1, 089
Cleveland	0. 2%	7, 219	8, 307	1, 088
Syracuse	4. 4%	7, 496	8, 584	1, 088
Rochester	3. 6%	7, 419	8, 506	1, 087
Manchester	6. 7%	7, 732	8, 819	1, 087
Akron/Canton, OH	0. 2%	7, 258	8, 332	1, 074
Pittsburgh	0. 5%	7, 325	8, 399	1, 074
Baltimore	1. 3%	7, 532	8, 601	1, 069
Washington National	1. 0%	7, 529	8, 587	1, 058
Washington Dulles	0. 9%	7, 507	8, 564	1, 057
Toledo	0. 2%	7, 173	8, 205	1, 032
Flint	1. 6%	7, 179	8, 202	1, 023
Richmond	0. 6%	7, 580	8, 594	1, 014
Norfolk	0. 8%	7, 653	8, 664	1, 011
Columbus	0. 1%	7, 280	8, 266	986
Lansing	1. 9%	7, 198	8, 159	961
Saginaw	2. 8%	7, 222	8, 183	961
Roanoke	0. 1%	7, 507	8, 455	948
Charleston	0. 0%	7, 405	8, 353	948
Raleigh/Durham	0. 1%	7, 625	8, 545	920
Dayton	0. 5%	7, 290	8, 197	907
Greensboro	0. 0%	7, 584	8, 478	894

## 84 of Northwest's 99 Domestic Nonstop Detroit Markets Would Be Better Served Over Detroit than San Francisco

Including the New York and Washington Airports,  
2 of the Largest U.S.- China O&D Markets

Nonstop NW Market	Via DTW Percent Circuitry	Miles Via DTW	Miles Via SFO (Disadvantage)	DTW Miles Advantage
Fort Wayne	1.2%	7,251	8,138	887
Alpena	5.6%	7,322	8,208	886
Kalamazoo	2.2%	7,237	8,112	875
Grand Rapids	2.9%	7,243	8,112	869
Cincinnati	0.7%	7,353	8,182	829
Charlotte	0.0%	7,637	8,451	814
South Bend	2.6%	7,280	8,076	796
Muskegon	4.0%	7,284	8,075	791
Benton Harbor	3.0%	7,282	8,067	785
Pellston	7.0%	7,366	8,148	782
Lexington	0.7%	7,420	8,198	778
Traverse City	5.9%	7,331	8,108	777
Greenville/Spartanburg, SC	0.2%	7,633	8,379	746
Indianapolis	1.8%	7,355	8,090	735
Louisville	1.3%	7,430	8,136	706
Lafayette	2.6%	7,348	8,050	702
Knoxville	0.6%	7,567	8,266	699
Chicago Midway	4.1%	7,352	8,001	649
Chicago O'Hare	4.4%	7,358	7,993	635
Milwaukee	5.4%	7,361	7,991	630
Jacksonville	0.3%	7,938	8,512	574
Green Bay	7.6%	7,411	7,982	571
Atlanta	0.9%	7,720	8,285	565
Champaign	3.7%	7,422	7,982	560
Evansville	2.6%	7,488	8,041	553
Appleton	7.6%	7,415	7,968	553
Marquette County	10.6%	7,487	8,022	535
Nashville	1.9%	7,580	8,114	534
Rockford	5.9%	7,418	7,931	513
Orlando	0.4%	8,075	8,587	512
Bloomington-Normal, IL	4.5%	7,437	7,945	508
West Palm Beach	0.3%	8,212	8,712	500
Madison	7.1%	7,435	7,917	482
Fort Lauderdale	0.3%	8,254	8,730	476
Miami	0.3%	8,271	8,731	460
Tampa	0.7%	8,109	8,539	430
Wausau	9.6%	7,487	7,908	421
Fort Myers	0.6%	8,204	8,617	413
Birmingham	2.0%	7,749	8,160	411
Sarasota	0.7%	8,148	8,556	408



## 84 of Northwest's 99 Domestic Nonstop Detroit Markets Would Be Better Served Over Detroit than San Francisco

Including the New York and Washington Airports,  
2 of the Largest U.S.- China O&D Markets

Nonstop NW Market	Via DTW Percent Circuity	Miles Via DTW	Miles Via SFO	DTW Miles Advantage (Disadvantage)
St Louis	5. 2%	7, 563	7, 882	319
Memphis	4. 2%	7, 733	7, 954	221
Duluth	15. 2%	7, 663	7, 809	146
Minneapolis	13. 4%	7, 651	7, 737	86
Des Moines	10. 4%	7, 655	7, 697	42
New Orleans	4. 2%	8, 051	8, 058	7
Kansas City	9. 9%	7, 750	7, 653	(97)
Houston Intercontinental	8. 4%	8, 200	7, 783	(417)
Houston Hobby	8. 2%	8, 216	7, 797	(419)
Dallas/Fort Worth	10. 4%	8, 109	7, 612	(497)
Denver	23. 1%	8, 256	7, 104	(1,152)
Anchorage	134. 4%	10, 100	8, 166	(1,934)
Phoenix	29. 8%	8, 791	6, 801	(1,990)
Seattle/Tacoma	58. 1%	9, 045	6, 831	(2, 214)
Las Vegas	36. 0%	8, 868	6, 565	(2,303)
Portland, O R	56. 6%	9, 071	6, 702	(2,369)
San Diego	37. 6%	9, 075	6, 598	(2,477)
Orange County	39. 2%	9, 079	6, 524	(2,555)
Reno	46. 1%	9, 021	6, 343	(2, 678)

*Note: Markets are those with nonstop service to DTW on NW and its commuter affiliates*

*Excludes major gateways (DTW, SFO, AND LAX)*

*Source: OAG Schedule Tapes*

## **Detroit's New Midfield Terminal Will Be the Superior Facility for Both Connecting and Local U.S. - China Passengers**

- The \$786 million terminal is 2,000,000 square feet.
- 74 jet gates.
- 25 commuter gates.<sup>99</sup>
  - An expandable remote boarding area for commuter and other domestic aircraft will connect to the main terminal via an underground moving walkway.
- Gates connected by both overhead trams and moving walkways for passenger convenience.
  - Overhead trams travel from one end of the concourse to the other in 2.5 minutes.
- 13,000 space parking deck.
- Connecting Link with Shopping Mall and WorldClub.
- Concession area is more than twice as large as the existing facility.
- By 2005, will be able to process 3,200 international passengers per hour.
- Scheduled to open 2001.
- Interim improvements of \$60 million have added 20,000 Square feet of space for processing departing international passengers.

## Michigan Exports to China (PRC) by Industry 1998

Industry	1998
Total All Industries	\$253,980,952
Industrial Machinery, Computer Equipment	\$118,643,578
Transportation Equipment	\$49,221,790
Electronic, Electric Equip, except Computers	\$28,602,433
Instruments and rRelated Products	\$17,391,012
Chemicals and Allied Products	\$9,579,132
Furniture and Fixtures	\$8,073,068
Primary Metal Industries	\$5,102,116
Scrap and Waste	\$4,203,538
Franbriacated Metal Products	\$3,952,050
Stone, Clay and Glass Products	\$2,808,843
Rubber and Misc. Plastics Products	\$2,079,479
Food and Kindred Products	\$713,597
Misc. <b>Manufacturing</b> Industries	\$703,889
Paper and <b>Alied</b> Products	\$493,472
Leather and Leather Products	\$485,514
Charity, Military NIK Shipments < 10K NIK	\$363,534
Printing and <b>Publishing</b>	\$337,894
Special Classification Provisions, Not Specified	\$313,254
Apparel and Other Textile Products	\$243,163
Petroleum and Coal Products	\$218,698
Ag ricu ltu ral Production - Livestock	\$212,481
Textile Mill Products	\$184,283
Lumber and Wood Products	\$51,209
Nonmetallic Minerals, Except Fuels	\$2,925

Source: Adjustments to data from U.S. Census Bureau, Foreign Trade Division by MISER

**Northwest's Proposed U.S. - China Services Will Provide a Significant Economic Benefit to the Detroit Region**

**Impact of Additional Visitors**

Item	Current	Year 1	Year 2
Annual Frequencies, Each Direction <sup>1</sup>	468	728	832
Incremental Additional Frequencies vs. Current		260	364
Annual Seats, Both Directions <sup>1</sup>	371,696	606,164	690,664
Incremental Additional Seats vs. Current		234,468	318,968
Estimated Average Load Factor <sup>2</sup>		75%	75%
Total Pax on Board New Services (Excl. 5th Freedom Beyond NRT)		175,851	239,226
% of Passengers Travelling to or from Region <sup>3</sup>		30%	30%
Estimated Passengers Travelling to or from Region		52,755	71,768
% of Passengers Visiting Region from Overseas <sup>3</sup>		42%	42%
Estimated Visitors from Overseas Utilizing New Services		22,157	30,142
Estimated Stimulization (New Visitors to Region)		100%	100%
Net New Visitors to Region		22,157	30,142
Average Expenditure per Visitor <sup>3, 4</sup>		\$1,397	\$1,425
Total Primary Visitor Expenditures in Region		\$30,960,513	\$42,960,865
Multiplier (for Visitor Expenditures) <sup>5</sup>			
Induced Expenditures		\$30,960,513	\$42,960,865
Total Visitor Impact on Region (Primary and Induced Expenditures)		\$61,921,027	\$85,921,731

**Impact of Passenger Revenues**

Item	Current	Year 1	Year 2
Average Revenue per On-Board Passenger (Estimated)		\$1,100	\$1,100
Total Passenger Revenue		\$193,436,100	\$263,148,600
% of Revenue Generated in Region <sup>3</sup>		17%	17%
Total Passenger Revenue Generated in Region (Primary Impact)		\$32,884,137	\$44,735,262
Multiplier <sup>5</sup>		1	1
Induced Expenditures		\$32,884,137	\$44,735,262
Total Impact on Region (Primary and Induced Expenditures)		\$65,768,274	\$89,470,524

**Impact of Cargo**

Item	Current	Year 1	Year 2
Additional Belly Cargo Capacity, Each Way (lbs.)		8,320,000	11,648,000
Additional Freight Capacity, Each Way (lbs.) <sup>1</sup>		22,880,000	45,760,000
Total Additional Freight Capacity, Each Way (lbs.)		31,200,000	57,408,000
Estimated Load Factor, Westbound Attributable to Region		35%	35%
Estimated Load Factor, Eastbound Attributable to Region		35%	35%
Annual On Board Freight Traffic on New Services, Westbound (lbs.)		23,400,000	43,056,000
Annual On Board Freight Traffic on New Services, Eastbound (lbs.)		23,400,000	43,056,000
Estimated Revenue per Pound		\$1 .00	\$1 .00
Total Revenue Accrued		\$46,800,000	\$86,112,000
% of Revenue Accruing to Region		35%	35%
Total Revenue Accruing to Region (Primary Impact)		\$16,380,000	\$30,139,200
Multiplier <sup>5</sup>			
Induced Impact		\$16,380,000	\$30,139,200
Total Impact		\$32,760,000	\$60,278,400

**Summary**

Impact of Additional Visitors	\$61,921,027	\$85,921,731
Impact of Passenger Revenues	\$65,768,274	\$89,470,524
Impact of Cargo	\$32,760,000	\$60,278,400
Total Regional Impact of New Passenger Services	\$160,449,301	\$235,670,655

*Sources:*

- 1/ Application of Northwest Airlines
- 2/ Estimated from Northwest 1998 Pacific results
- 3/ Economic Impact Study-Detroit Metropolitan Wayne County Airport
- 4/ Adjusted to 1999 and 2000 via CPI
- 5/ Implied Multiplier from Smith, Wilbur, The Economic Impact of Civil Aviation on the U.S. Economy

**Single Flight Number Connecting Service  
Would be More Valuable to the New York Area Chinese  
Immigrants than to those in the Washington Area**

**Chinese Immigrants Living in the US by State**

---

<b>Washington Area</b>		<b>New York Area</b>	
Maryland	<b>9,206</b>	New York	128,133
Virginia	6,236	New Jersey	17,823
DC	<u>1,313</u>	<u>Connecticut</u>	<u>3,653</u>
Total	16,755	Total	149,609

---

Source: *Bureau of Census 1990 Population Survey*

**Single Flight Number Connecting Service  
Would be More Valuable to the New York Area  
Chinese-American Community than to that in the  
Washington, DC Area**

<u>Chinese-American Population</u>		
<b>Market</b>	<b>Rank</b>	<b>Population</b>
New York CMSA	2	320,201
Washington DC CMSA	7	39,034

CMSA: Consolidated Metropolitan Statistical Area

Source: *Bureau of Census 1990 Population Survey as quoted at  
[www.asianmediaguide.com](http://www.asianmediaguide.com)*